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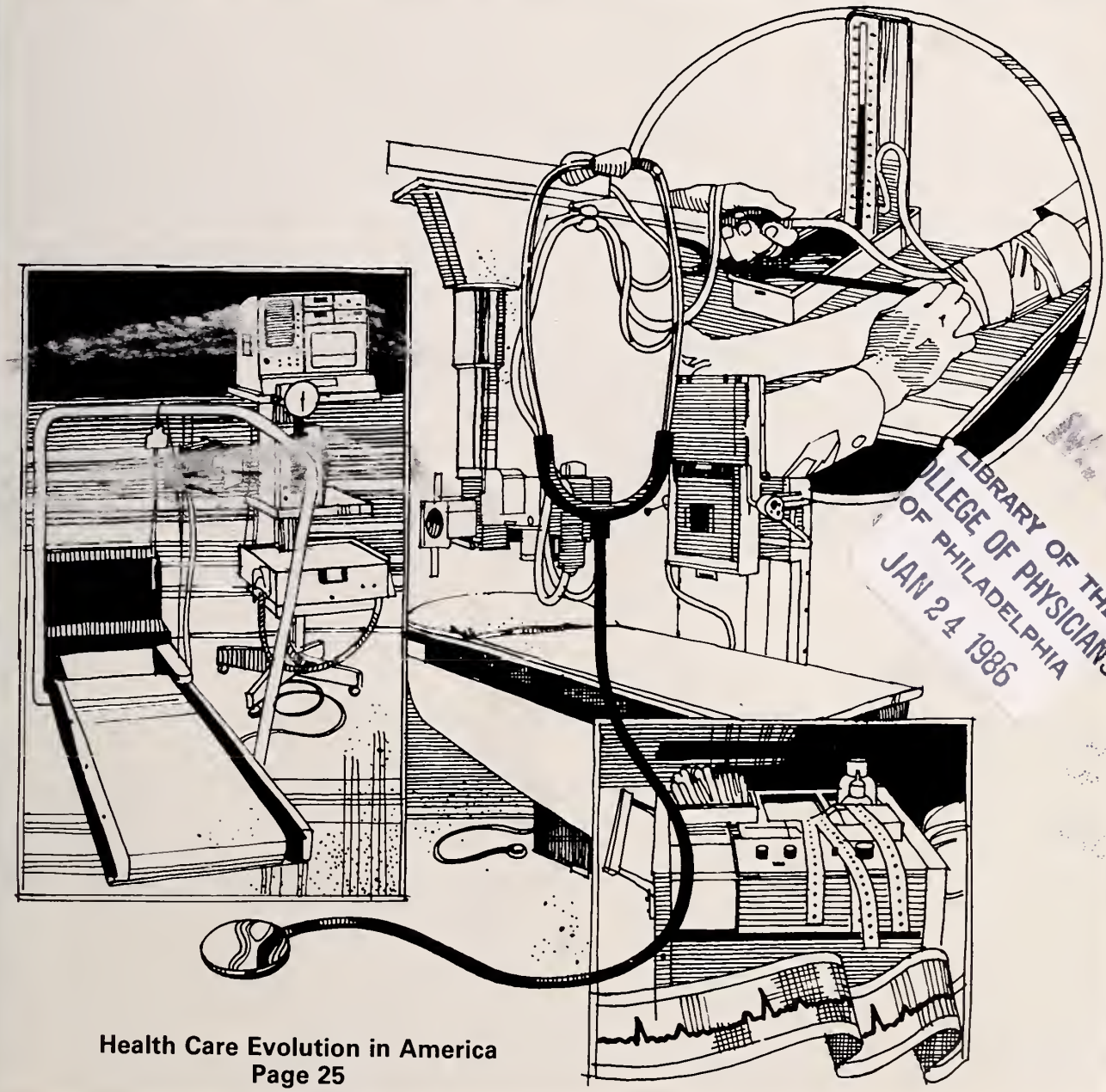

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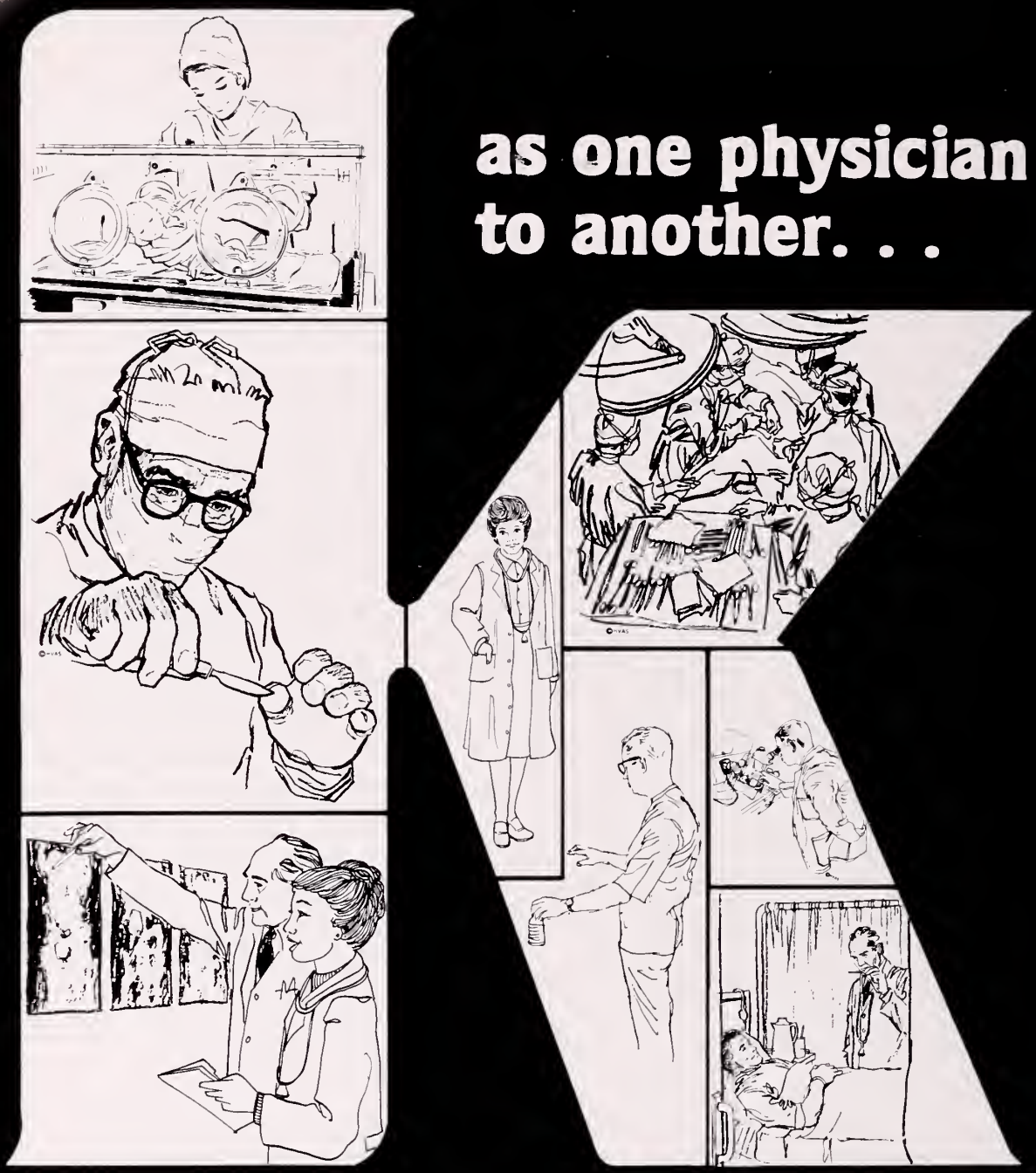

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Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Transient amnesia or memory impairment has been reported in association with the use of benzodiazepines.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

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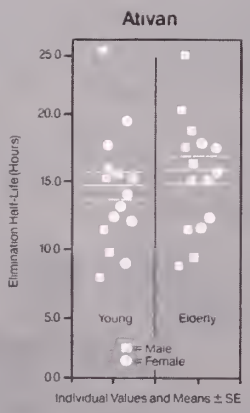
Comparison of elimination half-lives in young and elderly subjects.



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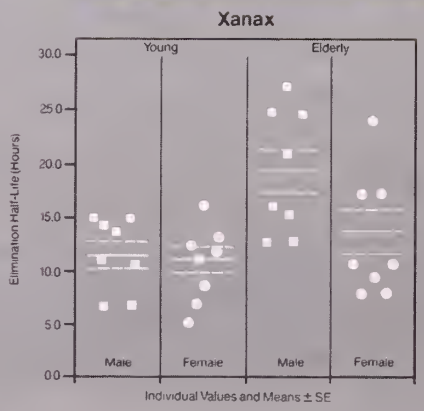

Xanax® (alprazolam)[3] CIV
Xanax® requires *oxidative* (P450) metabolism; significant differences in half-life are shown between young and elderly male subjects; half-life is minimally influenced by age in women.

References:
1. Greenblatt DJ: Clinical study, pharmacokinetics and bioavailability in the elderly, Ativan® (lorazepam). Data on file, Wyeth Laboratories.
2. Greenblatt DJ, Allen MD, Locniskar A, et al: Lorazepam kinetics in the elderly. Clin Pharmacol Ther 26:103, 1979.
3. Greenblatt DJ, Divoll M, Abernethy DR, et al Alprazolam kinetics in the elderly. Arch Gen Psychiatry 40:287, 1983.

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PRESIDENT'S PAGE

The beginning of a new year is always a sobering and disquieting time. This apprehension is accentuated for medicine in 1986 by the widely held, and probably accurate, feeling that during the next year or two decisions will be made, legislation passed, and forces set loose, which will profoundly change and mold American medicine well into the next century.

We can look on this as an impending disaster about which we can do little and the prophecies of doom will become self-fulfilling. Or, we can mobilize our considerable talents and resources to save what must be preserved and guide the changes in the right direction to the best of our ability.

I firmly believe we now have the core in organized medicine with which we can start. The local and state medical societies, together with the American Medical Association, encompass a tremendous number of talented and dedicated people. We have in these organizations a wealth of reliable, timely, and readily available information which is crucial in the battles we will face.

It appears to me that the deciding factor in these next few, pivotal years will be our ability or inability to bring the sermon to the large numbers of physicians who do not go to church. If we are to prevail, or even survive the avalanche of change which lies just ahead, we must have a substantial majority of physicians informed and participating in medical offices, clinics, hospitals, legislative halls, courts, and throughout society.

The self-reliance, independence, and dedication to individual responsibility which makes such good doctors are not necessarily the building stones of large, cohesive, politically effective, organizations. This is one problem we must solve.

A second, less flattering, problem is the number of physicians who live in their small, isolated world, and see only their own selfish interests. Many realize that any good achieved by organized medicine will help them and they are willing to take the free ride.

I believe it is crucial, as we start this new year, that we embark on a program which will involve the large majority of physicians in an informed and effective force. The only way that we can effectively deliver the message and mobilize our considerable forces is through personal contact with our non-involved and non-active, fellow physicians. This means a great deal of time and hard work by those in organized medicine.

I also believe that there is slowly increasing sympathy throughout society for many of the things we have been saying about the quality of medical care, the liability mess, the failure of government to solve problems, and the increasing problem of indigent care. We can take advantage of, and nurture, this still weak trend to preserve and improve what is best in medicine, but we must be willing to pay the price—and it will be high.

Richard F. Hench, M.D.
KMA President-Elect

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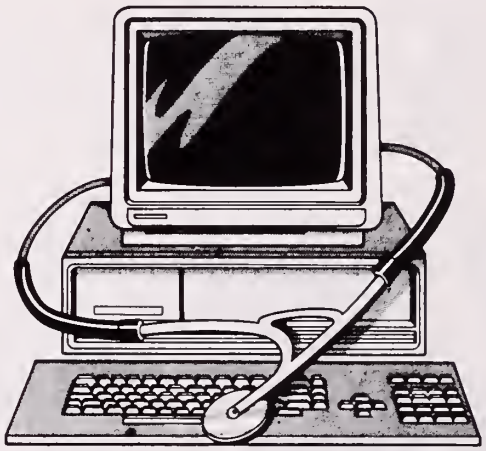

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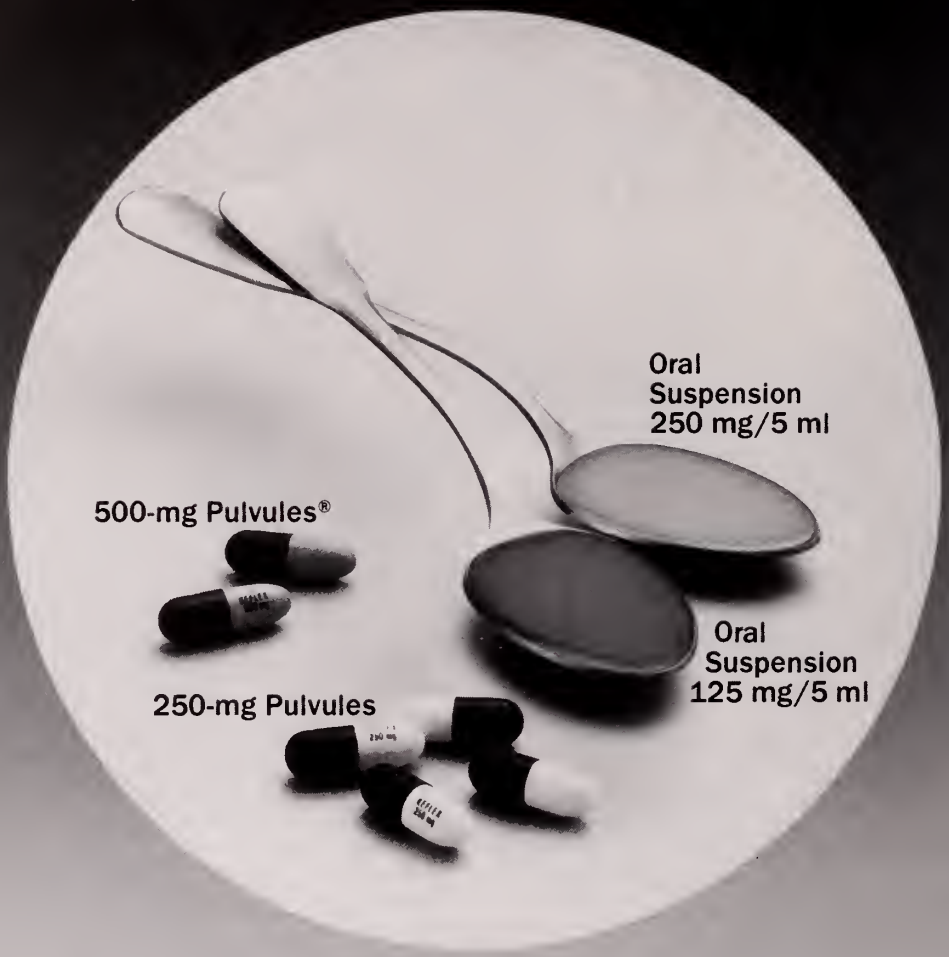

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Yersinia Enterocolitica Hepatic Abscesses

ANNE H. HOPWOOD, M.D. AND BRUCE W. RIDDLE, M.D.

There have been nine reported cases of Yersinia enterocolitica in the past 11 years in Kentucky. This is a case of Yersinia enterocolitica sepsis with multiple hepatic abscesses.

This 71-year-old widowed hairdresser was hospitalized on 1-16-82 with a three day history of weakness, chills, fever, generalized aching and syncope. Past history was unremarkable except for chronic obstructive pulmonary disease and chronic anemia.

Physical exam on admission showed temperature 101.8, pulse 110, blood pressure 118/72, bilateral cataracts and unremarkable pulmonary, cardiac and abdominal exams.

Admitting laboratory data included hemoglobin 10.8, hematocrit 32.2, MCV 98.3, platelets 91,000, white blood count 12,900. Urinalysis showed 12-15 wbc's and 2+ bacteria, BUN 43, creatinine 1.9, total protein 6.5, albumin 2.8, SGOT 117, SGPT 102, alkaline phosphatase 90, total bilirubin 0.3, iron 41. Chest x-ray showed signs of chronic obstructive pulmonary disease and normal heart size. Further investigations included negative urine and blood cultures.

She was treated with Cephradine and defervesced over the first 48 hours of hospitalization. However, the patient later developed abdominal swelling and tenderness with rebound and guarding, fluid wave and hypoactive bowel sounds, along with confusion, lethargy and fever. Additional studies included repeat liver enzyme measurements showing SGOT 1110, SGPT 951, alkaline phosphatase 270, total bilirubin 2.9; also BUN 113, creatinine 4.4, albumin 1.6, urinalysis was loaded with wbc's, 2+ bacteria, 2+ albumin and urine culture grew greater than 100,000 colonies of Enterobacter aerogenes. Cerebrospinal fluid exam and cultures were negative. Oral cholecystogram did not visualize and gallbladder ultrasound was normal. Sigmoidoscopy to 22 cm. was normal. CT scan of the abdomen showed many small hepatic densities throughout the liver, consistent with cysts, metastases or abscesses (see illustration number one). On 2-3-82, blood cultures were drawn and the patient was started on Moxalactam. Cefoxitin was added on 2-4 and Tobramycin on 2-5. She developed anuria, fever persisted and she expired on 2-6-82. On the same day as death, blood cultures were determined to be growing Yersinia enterocolitica sensitive to tobramycin, gentamicin, chloromphenicol, oxytetracycline, sulfa, trimethoprim and cefamandole and resistant to ampicillin, cephalothin, cefoxitin and carbenicillin.

Autopsy showed multiple abscesses of the liver with massive peritoneal effusion (see illustration number two). Examination of the bowel and kidneys was unremarkable.

Discussion

Yersinia enterocolitica is a facultative gram negative coccobacillus[1,2] which was first described by Gilbert in 1933 and has previously been called Bacterium enterocolitium, Pasteurella pseudotuberculosis type B and Pasteurella X. It has been isolated from a variety of rodent and domestic animals including swine, sheep, cattle, horses, dogs and cats. Transmission from animals to man has not been documented, although transmission from dogs and swine to man by a fecal-oral route appears likely. In addition, it has been isolated from lakes, streams and drinking water, but human infection from water is rare. It has been isolated from milk, ice cream, meat, oysters, mussels and food borne transmission to children has been documented.[3,4,5,6] Reported cases were rare prior to 1966,[1] but have significantly increased since then, although infections are still rare. Most cases are sporadic and without apparent source. Infections are more common in children and young adults and occur during the winter months.[5]

In humans, the portal of entry is usually thorough the alimentary tract by food contaminated with urine or

Fig. 1

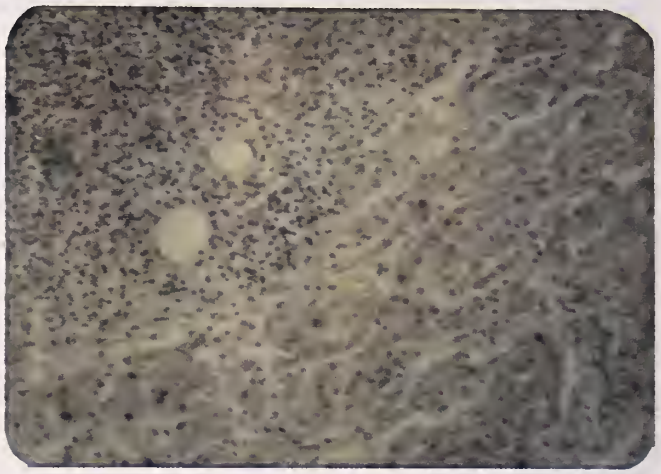

Fig. 2

feces.[7] The incubation period is estimated to be four to 10 days. Disease manifestations vary according to age, sex and physical condition of the host. Enterocolitis accounts for two thirds of infections[1] and usually occur in children less than five years of age.[9] The most common symptoms are fever, diarrhea and abdominal pain[5,10,11] lasting one to three weeks. Fecal leukocytes, blood or mucous may be present.[1] In older children and adolescents, the most common presentation is right lower quadrant pain, fever and leukocytosis which may be clinically indistinguishable from acute appendicitis.[9] Those patients who have gone to surgery have had terminal ileitis and/or mesenteric lymphadenitis. In adults, diarrhea is the most common disease manifestation. In addition, adults may have extraintestinal problems, including polyarthritis, erythema nodosum and erythema multiforme.[9,13] Septicemia is uncommon and is most often reported in patients with diabetes, cirrhosis,[16] hemochromatosis,[16] severe anemia,[16] malignancy and in older adults.[1,8,14,15] Patients usually have headaches, fever and abdominal pain with or without vomiting and diarrhea.[1,16] Septicemia patients may develop hepatic or splenic abscesses,[16,17,18] meningitis, osteomyelitis, wound infections, endocarditis and myocotic aneurysm.[5,14,19]

Diagnosis is made by culturing the organism or by serologic tests. Depending on the clinical syndrome, stool, blood, peritoneal fluid or mesenteric lymph node cultures may grow the organism. Isolation from feces is sometimes difficult because of overgrowth by normal fecal flora and by their slow growth.[20] Incubation at cooler temperatures enhances growth.[1,9] Agglutinating antibodies appear soon after onset of illness and generally disappear within two to six weeks.[1]

Yersinia enterocolitica is usually sensitive to Aminoglycosides, Chloramphenicol, Tetracycline, Sulfonamides, Trimethoprim, Sulfamethoxazole and are usually resistant to Ampicillin, Penicillin, Cephalosporins and Carbenicillin.[2]

Patients with enterocolitis or mesenteric lymphadenitis may not require antimicrobial therapy since these infections are usually self limited.[5,9] Patients with septicemia have a mortality of 50% despite treatment.[5] They should be treated with Gentamicin, 5 mg/kg/day i.v. or chloramphenicol, 50 mg/kg/day orally or i.v. for at least two weeks.[8,21] All patients with Yersinia enterocolitica infections should be placed in enteric isolation.[8,9,21]

In retrospect, it is interesting to note that this patient lived in a mice infested neighborhood. Her pet poodle had prided itself in depositing its daily victims (mice) at the patient's feet in her home. Although no autopsy was performed on her pet dog, we are quite suspicious that the dog had contracted Yersinia enterocolitica from the mice. In turn, the patient who slept with her dog, could have very easily acquired the organism from her dog.

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Surgical Treatment of Hepatic Neoplasms

LOUIS S. HEUSER, M.D.

Surgical resection remains the treatment most likely to achieve cure in those patients with both primary and metastatic neoplasms of the liver. Operative morbidity and mortality for surgical resection of hepatic neoplasms has been systematically reduced over the past 30 years. For those patients with diffuse hepatic involvement, regional arterial infusion with 5 floxuridine offers significant palliation in almost two-thirds of the patients in which it is used. With the development of new and more specific chemotherapeutic agents, even better results are anticipated.

Cancers of the liver can be classified into two broad categories, those that originate in the liver (primary liver cancers) and cancers metastatic to the liver from extrahepatic primaries. Primary liver cancer arises from the hepatocytes (hepatocellular carcinoma) or from the bile duct epithelia (cholangiocarcinoma). Carcinomas of the colon, stomach, lung, pancreas, kidney and breast commonly metastasize to the liver. The course of the dispersion from stomach, pancreas and breast cancers makes surgical resection of hepatic metastases from these primary cancers unrewarding, as isolated hepatic metastases are the exceptions rather than the rule.[1,2] However, the most effective treatment of hepatocellular carcinoma, cholangiocarcinoma and isolated metastases from colorectal cancers is surgical resection. The anatomic location of the lesions within the liver substance and the likelihood of spread outside the liver are factors that determine surgical resectability.

Colon cancer has predictable patterns of recurrence and metastases.[3] Twenty percent of all patients with colorectal cancer have hepatic metastases at the time of operation. Patients without hepatic spread at the time of initial detection of colon cancer will ultimately develop hepatic metastases in the course of their disease in 30% of the cases. Moreover, 30% of the patients with hepatic metastases will have disease confined to the liver. It is this pattern of isolated dispersion that makes surgical resection a useful treatment for hepatic metastases from colon cancer. Hepatocellular and cholangiocarcinoma tend to grow within the liver substance for long periods before systemic spread. If these lesions are located in areas of the liver that can be resected anatomically, then resection offers the best chance of cure.

A history of exposure to vinyl chloride or hepatitis can arouse suspicion of a primary hepatic cancer. Cirrhotics have a higher risk of hepatocellular carcinoma. Patients with colon cancer should be continuously followed for the development of hepatic metastases by history, physical exam and alkaline phosphate determinations at regular intervals. Once the diagnosis is suspected, computerized axial tomography, ultrasound and liver spleen scans are all useful diagnostic aids.

The preoperative evaluation of the patient with a potentially resectable hepatic cancer is as follows. Hepatic function as reflected in normal serum albumin, bilirubin and clotting studies is the first requirement as the jaundiced patient will not tolerate further removal of hepatic tissue. All the information needed to evaluate hepatic function is contained in a SMA 18 and prothrombin time and partial thromboplastin time reports. Alkaline phosphatase will almost always be elevated as well as the hepatic transaminases (serum glutamate oxalacetate transaminase, lactate dehydrogenase). These abnormalities do not make the patient ineligible for resection.[4]

The final prerequisite for resection is the location of the lesion within the liver. Extended resection of the liver is possible because of the tremendous capacity of the liver for regeneration. If the lesion lies within one lobe of the liver, then lobectomy or even extended lobectomy can be performed. The lesions not suitable for resection are those that extend between the two lobes of the liver making an anatomic resection impossible.

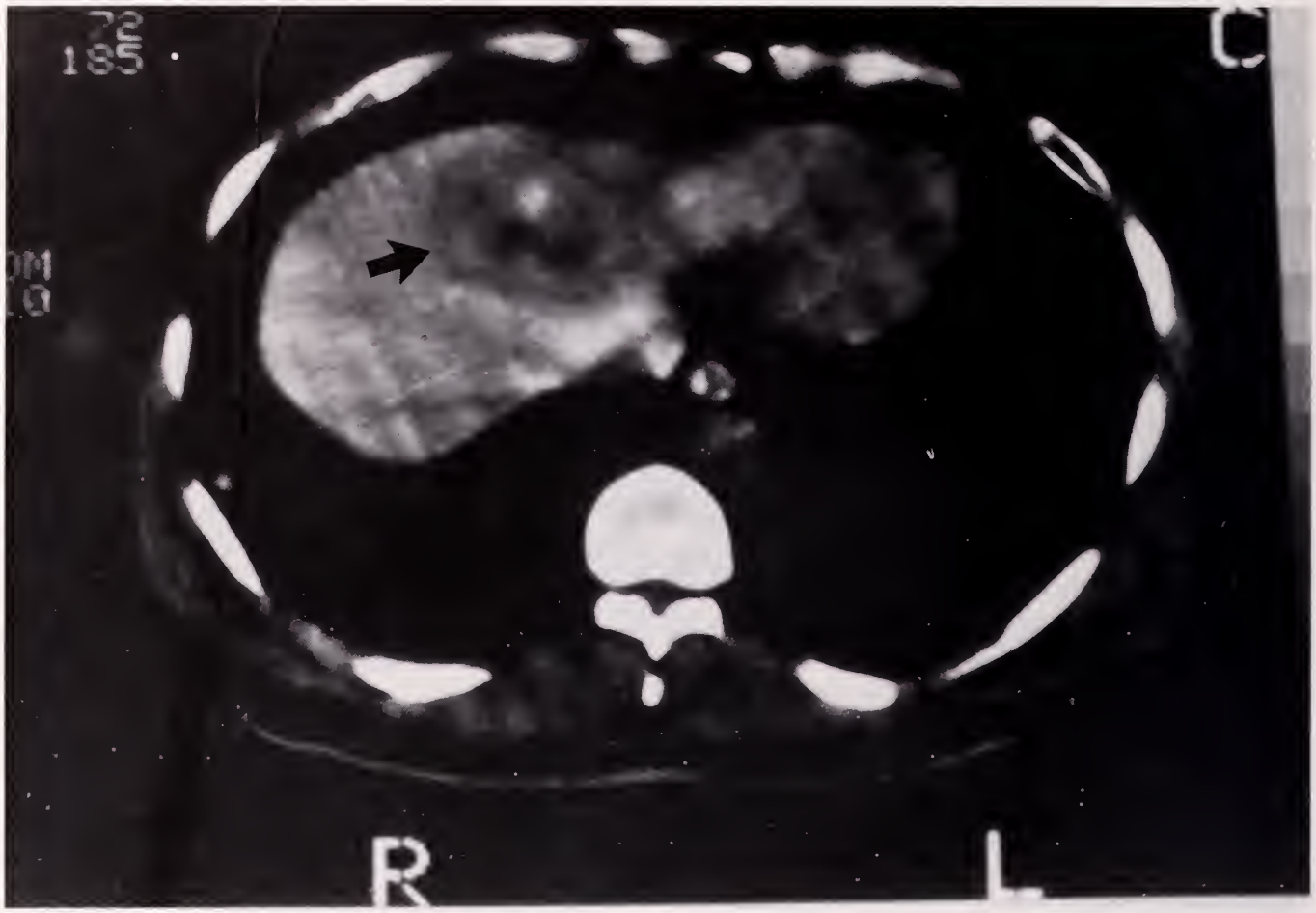

Fig. 1: CT scan of the abdomen showing isolated hepatic metastases (arrow) in the right lobe of the liver.

A preoperative CT scan and a hepato-arteriogram are our best methods of predicting resectability.

The morbidity and mortality rate of hepatic resection is significant but has been systematically reduced over the past 30 years.[4,5] Preoperative evaluation, operative and anesthetic technique, and postoperative care have all added to the reduction in significant complication and mortality from the procedure.

Case Report

A 53-year-old male presented with elevated alkaline phosphatase 18 months after a left hemicolectomy for "Dukes B" cancer of the sigmoid colon. Preoperative evaluation showed an elevated alkaline phosphatase but normal liver functions otherwise. Computerized axial tomography showed an isolated metastases in the right lobe of the liver (Fig. 1). Hepatic arteriogram (Fig. 2) demonstrated neovascularization of the lesion. He underwent resection of the right lobe of the liver (Fig. 3) and recovered without complication. He is free of disease 6 months after operation. This patient now has an expected 5-year survival rate of 20 to 25%. Although this figure is low, his survival without treatment is zero.

Treatment Alternatives

There are treatment choices beyond lines of anatomic research for the patient with diffuse intrahepatic spread. Systemic chemotherapy has had little effect on progression of these cancers within the liver.[6] Recently, technology has become available that allows delivery of chemotherapeutic agents directly into the hepatic artery via a totally implantable infusion pump and catheter.[7-9] This method is theoretically appealing because of the phenomenon of tumor induced angiogenesis (neovascularization). Hepatic neoplasms acquire their own blood supply from the hepatic vascular system. As seen in Figure 4, all solid cancers induce new capillary growth, which supplies the increased metabolic demands of the cancer cells. Infusion of 5 FUDR through the hepatic

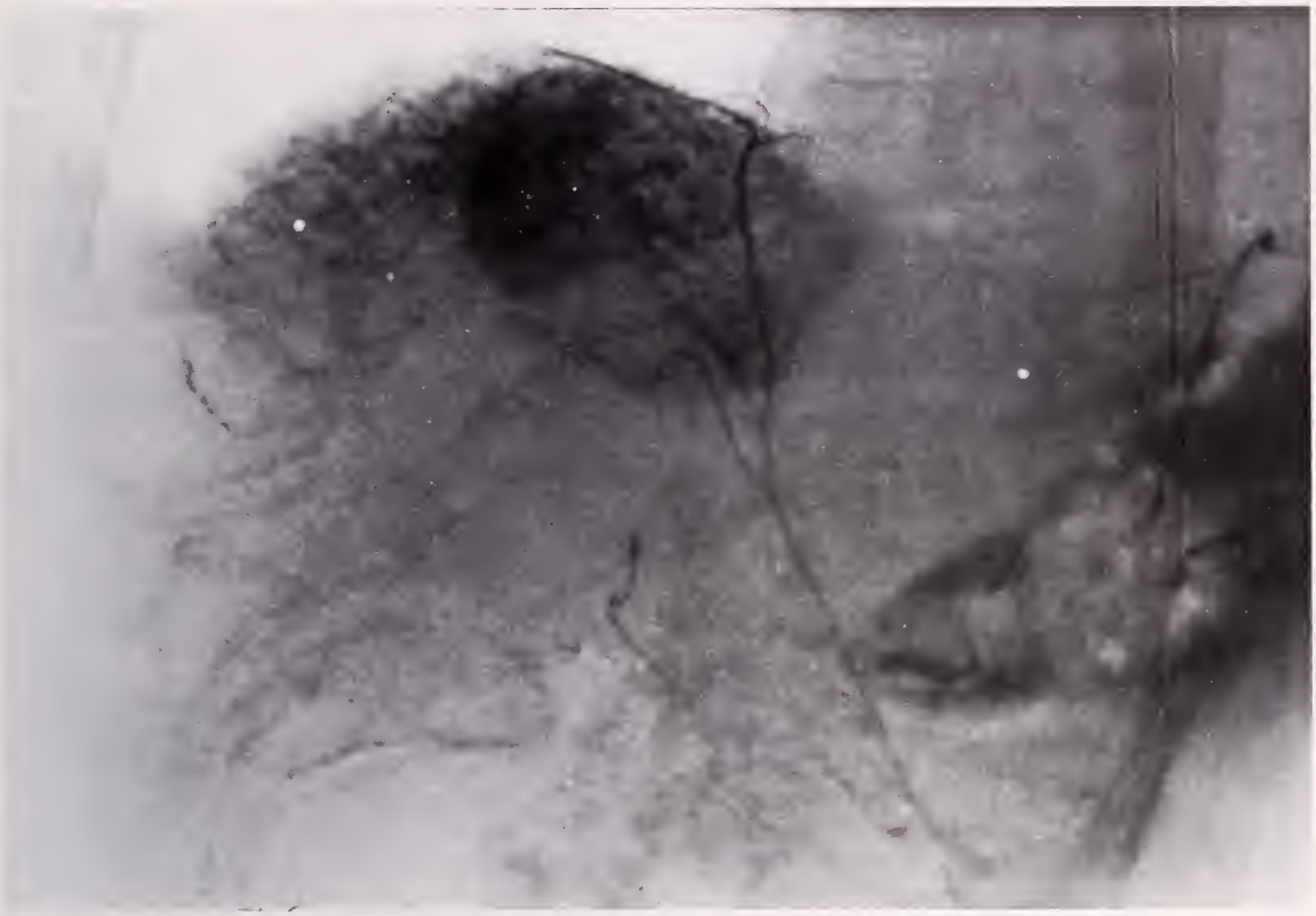

Fig. 2: Hepatic arteriogram shows neovascularization (angiogenesis) of the solitary metastases.

artery from an implantable infusion pump has allowed delivery of high doses of 5 FUDR directly to the liver. This process maximizes delivery of 5 FUDR to the cancer and minimizes systemic complication of the drug. Although there have been no prospective, randomized trials proving the effectiveness of this technique, we have been impressed with significant regression of established lesions and excellent patient acceptance. Patients with the hepatic artery infusion catheter and pump can return to productive, active lifestyles in four to six weeks after placement. The pump must be refilled at 14 day intervals during outpatient office visits. The most dramatic responses have been with metastases from colon primaries, but we have seen significant responses in patients with primary hepatocellular carcinomas and cholangiocarcinomas.

Twenty-one hepatic artery infusion pumps have been implanted at the University of Louisville. After two years, our results show that 33% of patients had complete regression of the hepatic lesions, which was proved by reoperation or CT scan. An additional 33% showed significant (>50%) regression of their cancer by CT scan evaluation. Finally, 33% of patients so treated showed continued progression of tumor growth despite intraarterial infusion.

A significant number of patients with primary liver cancers and liver metastases from colon cancers can be effectively treated by liver resection or intraarterial chemotherapy. With the development of new and more specific chemotherapeutic agents, even better results are anticipated.

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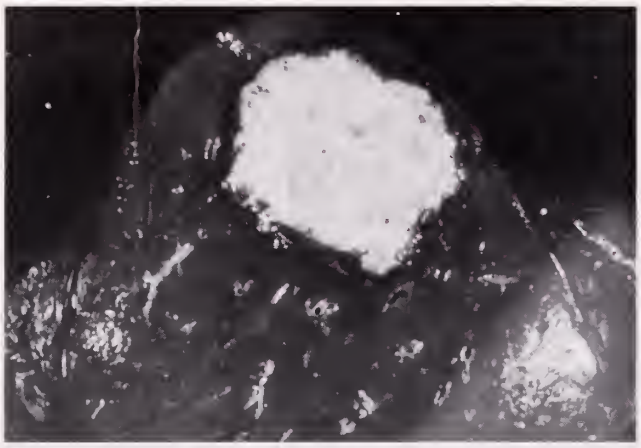

Fig. 3: Pathologic specimen of resected right lobe of the liver. The well circumscribed lesion was the only hepatic metastasis.

Fig. 4: The process of tumor induced angiogenesis or neovascularization is demonstrated by intense growth of new capillaries to an implanted animal tumor (right of figure).

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EDITORIAL

1986 and Hairy Mammoths

People who dig into our history by digging into our planet once found an icy, somewhat preserved, carcass of a hairy mammoth. He must not have been hairy enough since he was destroyed by a cold wave, but curiously, in the stomach of the specimen were undigested flowers, his last meal, suggesting that the cold wave was very acute; neither the flowers nor the mammoth realized they were about to freeze.

Had he known, the mammoth could have trundled off to warmer climes, provided there were any. But nothing in his genes or his smallish brain gave him counsel and so he and his kind perished, never really understanding. Stoneheaded intransigence may have been his lethal quality. Would experience have helped him? Had he the chance to do it again would he have hurried to the sunny side of his tectal plate, there to breed once more? Probably not, since the changed condition required him to change and it was all too hard to understand.

These fey thoughts are stimulated by the recent remarks of a *confrere*. "If only I could live it again—with hindsight . . . " The poignant inference was that experience sharply modifies our responses, a nice fantasy among those of us being propelled, knees locked, into the Golden Age. It is here submitted that this is indeed a fantasy. Lived again, our life and times would be largely unchanged. Lived again, the primary elements of our personal and professional lives would be both happily and sadly similar, since our reactions and relationships are based on personal characteristics of proven durability. Selfish? We'd be selfish again. Fearful? We'd still be and our moves would show it once more. We've not been as haphazardly indifferent and impulsive as we seemed—we were locked characterologically into those reactions. To have changed our ways would have required a change in us and most of us believe we've done our human best. Limiting it to our **human** best may have been our problem. But for all of us there are some pivotal points, medically and personally, and an awareness of our choices is frightening and confusing.

In January of 1986 every physician senses the Frigid Presence rolling down on the Healing Arts and many voices offer insulation or flight. Our treasured independence, as private medical practitioners, is in our souls, our very essence. Work for someone? Take a job? Report to a boss? Absurd! Never! And it wasn't just a stance. Security and schedules might be good for some but for us, the ones who do—or did—most of the healing, want—or wanted—none of it. There is a problem here with tenses. What was, is, and will be seems to run all together in Medicine, 1986. Anyway, that independence, treasured or not, could be lethal to us.

And so we are puzzled and troubled by the choices we face. Should we pretend nothing is happening, or try to steer? Should we run and hide, or join up? This is where these inclinations to independence can be lethal, one we scarcely can change even "if only" we had hindsight. But we will inevitably make crucial practice choices, some even against our natures, and these will influence where another millenium's anthropologists will find our carcasses.

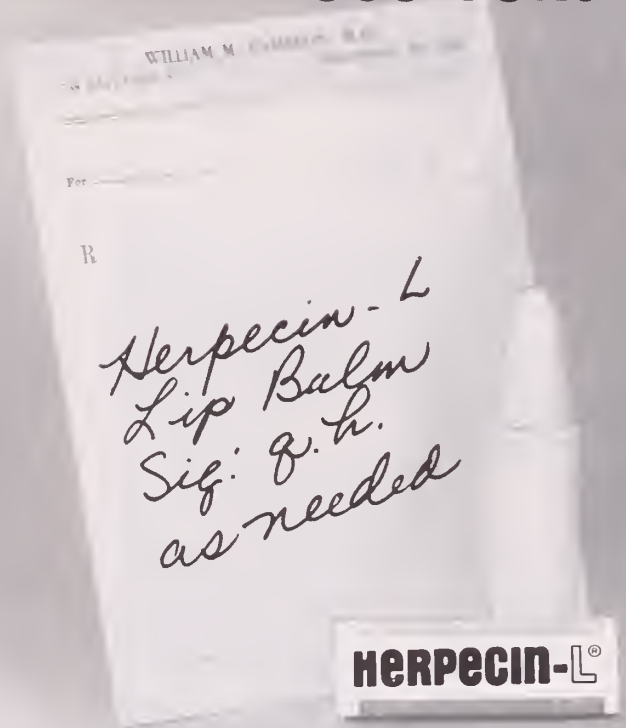
The new Ice Age will catch some, beeper on belt, shrimp in stomach, beside the buffet table at a meeting to hear the report of the Ad Hoc Steering Committee of the Physicians Association formed to consider ways to try to counter the latest move of the PDQ. Others will be found stacked on flat cars, having been declared surplus by HEW and wholesaled out to a tallow company. Some will be found huddled in shabby offices beside their grateful patients who are to be the other victims of the cold. Some will be found in silent, frozen, outpatient factories, (hospitals having long since disappeared), sprawled awkwardly beside ungrateful patients.

Still others won't be found at all. They bent, changed, conformed a bit, resisted some, and made it just in time to warmer climes. An endangered species, they lived to breed and prosper again.

Now, let's see. Who has a compass?

David L. Stewart, M.D.

Dx: recurrent herpes labialis



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Health Care Evolution In America

DAN A. MARTIN, M.D.

The purpose of this paper is to review recent health care trends in America. These trends are divided into "eras": (A) Scientific - Treatment (B) Eradication (C) Prevention and Wellness (D) Self Care (E) Stress and (F) Societal Decisions. Based on this background information, problems and future trends in health care are discussed. These include the dilemma of expensive services for a small segment of the population (eg, liver transplantation), increasing numbers of physicians, decreasing physician income, the changing activities and relationships of hospitals, the continuing crowding of most specialty areas selected by medical students, the paradoxical lack of adequate care for 12% of the population, and the continued progress of basic science in bioengineering. Physicians, economists, administrators, and legislators will have to work together closely to insure that past medical gains can be continued in the light of the challenge of high cost and the need for continued accessible care of high quality.

Sometimes it is useful to review past events and changes in a particular field in order to try to see future trends more clearly and to predict them more accurately. Changes in health care have been extremely rapid in the last 40 to 50 years. Based on a review of these events, it may be possible to anticipate and to make predictions concerning additional near as well as long-term changes in American health care.

I. **ERAS**. No specific dates can be given for the various periods of development of American health care, but there have been some reasonably specific occurrences which make it possible to divide the changes in health care into "Eras." Obviously this evolutionary process is continuous and there is overlap in these arbitrary stages.

A. **The Scientific—Treatment Era**. There is no agreed upon beginning date which marks the introduction of modern "science" into health care, but for years scientific research has been adding to the art of medicine facts which have come gradually to arm physicians and other health workers with the tools that have allowed them successfully to detect and **treat** conditions which have plagued the populace for years. Certainly a major event was the introduction about 1940 of the antibiotic penicillin which became available in sufficient amount to cure what previously had been serious and often fatal infections. Since then, there has been the creation of an almost unending number of other antibiotics as basic scientists and physicians have drawn beads on specific illnesses or specific disease-causing organisms. Without doubt antibiotics have been medically revolutionary and life saving.

A later significant advance in treatment, affecting large numbers of patients, occurred about 1950 when psychotherapeutic drugs began to be available to physicians who then became better able to treat illnesses of mind as well as body. Early drugs such as Thorazine were followed by a flood of similarly useful medications which began more and more to be tailored by pharmaceutical houses to suit a particular psychiatric need.

In more recent years and still in their remarkable infancy are increasingly effective drugs for treatment of cancer. Sometimes alone, sometimes in combination with other techniques, the anti-cancer drugs have begun to ameliorate and in some instances cure one malignancy after another until there is hope and expectation that even the most serious and pernicious cancers might ultimately yield to medical science.

Dozens of other treatment methods and techniques could be cited as examples of the effect of the scientific era, including the relatively new surgical techniques that allow corrective operations on hearts, brains, or amputated limbs.

However, these are illustrations of scientific advances in medical treatments which are aimed at events occurring after-the-fact of disease or injury.

B. **The Eradication Era**. Along with effective treatment modalities for infectious diseases came the ability, based on these scientific accomplishments, to **eradicate** certain diseases which for years had been prevalent, destructive, and costly. The best known in this category is smallpox. Gone now are the days of smallpox vaccinations because gone, now, is smallpox and the worldwide eradication of this disease was one of the greatest events ever to occur in the health field. The combining of vaccination with intense public health surveillance succeeded in eliminating smallpox totally, the last reported case in the world having occurred somewhere in the horn of Africa in 1977.[1] Equally dramatic in the United States has been the virtual elimination of polio. Following first the Salk killed-vaccine and then the Sabin live-vaccine, polio has been reduced from epidemics in which victims occupied whole hospitals set aside for that purpose to only a handful of cases which occur each year usually in religious groups that do not avail themselves of the vaccine or in persons entering the U.S. from countries (for example, Mexico) in which eradication is not so far advanced.

The day is approaching when measles, that occasionally deadly and often debilitating disease, will be eradicated, the U.S. Public Health Service having set its sights on that goal. Likewise, rubella and its threat to unborn children is dramatically less likely today as preventive vaccine combined with prompt detection and containment of micro-epidemics have limited its number of victims; even without further specific eradication efforts, rubella should cease to exist in approximately 25 years if all children continue to be immunized.[2]

C. **The Era of Prevention and Wellness**. Recently—and along with eradication—we have entered a period of prevention which, quite surprisingly, has had much more effect than might ever have been imagined. Although many persons for many years have been extolling the virtues of prevention, the idea seems to have caught on just recently with both the public at large and the majority of health workers. Much of the public now is acutely aware of making personal efforts at weight control and diet quality (low fat and low cholesterol). Many more people, not all simply following the advice of their physicians, can be found to have established exercise programs. Both competitive and non-competitive sports have increased in popularity throughout the United States. Jogging is probably the most evident new activity which until about 10 years ago was not taken seriously by very many people. Today, however, there are jogging areas or paths in even the most crowded urban centers for the hundreds of thousands of participants. In addition, vigorous activities like tennis and cycling plus aerobic and fitness programs continue to gain new converts.

Recognition of high blood pressure as a background problem for stroke and heart disease has sensitized a large part of the public to those serious health problems. Physicians now take seriously the patient with minimally or mildly elevated blood pressure since it has become known that, as a group, such persons do less well than those with strictly normal blood pressures. In the eight years between 1972 and 1980, the number of people with high blood pressure who had their blood pressure controlled by one method or another increased from 16% to 34%; [3] although still a significant challenge, the turn-a-round was almost unexpected even by those promoting control. Such encouraging results have fanned enthusiasm for all types of preventive measures and movements. It now seems indisputable that cigarettes are related causally to lung cancer (and probably to several other serious conditions) and with warnings and urgings, the number of adults who smoke has decreased to 33% in 1980 compared with 42% in 1964.[3]

Even deaths from auto accidents have decreased. Not long ago, the headline, "Sudden '82 Drop in Highway Deaths Creates Mystery," appeared in *The Nation's Health*, official newspaper of the American Public Health Association. Several possibilities were posed as answers to the unexpected figures. The 55 mile per hour speed limit seemed not to contribute since it had been in effect for some time. There was not thought to be less drunken driving. One conclusion was that drivers might have become generally more careful (with or without use of their seatbelts).

The point of these various illustrations is that preventive measures have begun to have a significant impact, so much so that some of the health goals for 1990 set by the U.S. Public Health Service in 1979 already have begun to be reached and have caused a re-evaluation of goals for 1990 and beyond.[4] Prevention has been having effects throughout the health care industry. Spurred by these positive results, health care activists have been instrumental in bringing about legislation which has had, and will continue to have, beneficial effects (even if not all persons agree with the legislation): 55 M.P.H. speed limit, harsher drunken driving

laws, curbs on smoking, package labeling, work place safety regulations, *etc.*

D. **The Self Care Era.** It now appears that the population has reached the point of being able to do as much or more about its health care status as can the health worker. Science has produced major positive efforts throughout the treatment, eradication, and prevention eras, and now it has become the responsibility of the individual to decide if he or she will smoke, will use alcohol appropriately, will maintain normal weight, will obtain exercise, will use seatbelts, *etc.* These are health decisions which can only be made by the individual and which probably have as much or more influence on health status today as anything that the medical profession can do additionally. There is a "wellness epidemic" among young and middle-aged people the extent of which is due largely to the taking into their own hands their health care at the urging of health workers and through legislative action.

Self-care embodies events which are a two edged sword. While some have benefited the individual greatly, occasionally self-care seems to go too far. There are those who apparently feel that if some vitamins and health foods are beneficial, additional ones must be even better and who, therefore, take considerably more than the recommended amounts to the point of causing physical illness. Still others, caught up in the self help effort, decide, for example, that no medical care is needed for childbirth or weight reduction. In the case of childbirth, there well may be risks to child and mother alike that a lay person is not able to appreciate and anticipate even though admittedly much about childbirth is natural and safe. In the case of weight reduction, many fall easy prey to fad diets and questionable salons some using totally unproven methods. Self-care might be more useful if carried out without assistance from fringe "health" personnel. It is somewhat paradoxical that previous basic scientific medical advances have made it possible for persons to reach the point of carrying out their health care usually for better, but occasionally for worse.

E. **The Era of Stress.** Frequently it is not recognized that a large percentage of visits to physicians takes place for what might be considered other than "medical" purposes. It is not unusual to learn that some patients—especially the elderly—attend physicians' offices as much for "social" purposes as anything else. Many are isolated by reason of their age and general immobility and enjoy contact with physicians and their office personnel on a regular basis. Often visits to physicians seem to be carried out in an attempt to relieve chronic stress—intolerable home situations, long term loss of jobs, marginal family income and the like. Stress is more likely to occur under the guise of illness when an entity like Medicare or Medicaid is paying for the visits. At other times, visits occur when persons wish to establish a basis for present or future work status or a basis for compensation for a suspected work related illness or injury. While these may be legitimate reasons to attend a physician, they do not represent areas in which the average physician has much experience or interest. Indeed, patients with anxiety seem frequently not to be well cared for by physicians either because of their lack of training in recognizing and treating it or because of their frustration with treatment results. Many of the anxiety producing situations visited upon patients are of such a general nature that their physicians, as well as they, are helpless to alter the situations. What can be done about a national recession which causes a loss of job or bounding inflation which requires the extraction of more dollars from a fixed income? Stressful lives mean that an ever increasing amount of time by medical and non-medical practitioners must be devoted to those who bend or break under the stress.

There is not likely to be any lessening of stress. Although strides will continue to be made in main stream medicine and it will continue to serve the population as in the past, there are conditions of society which have yielded slowly, if at all, to traditional medicine and which in fact, are not exclusively the problems of medicine, although they could be said to be legitimate targets of health care. These are such conditions as **alcoholism** (10-15 million people directly afflicted and 40-60 million afflicted indirectly as family members),[5] **divorce** (one divorce for every two marriages in 1982),[6] **spouse and child abuse** (925,000 children killed or injured each year),[7] **suicide** (10th leading cause of death in all persons and the 2nd leading cause in young people),[8] the **elderly** (5% of all people over 65 in nursing homes), **crime**. Other differently trained persons may contribute to the solution of those stressful societal needs; these include psychologists, mental health workers, guidance counselors, juvenile workers, vocational counselors, family and marital counselors. To the extent that they work within medical settings, they are considered "medical" but many, perhaps most, will not be directly connected to traditional health settings. The numbers of these types of persons will need to increase significantly as the pressures, consequences, and events

of modern society are felt: the need to succeed, unfulfilled self-expectations, lack of economic security, overreaching materialism, unplanned pregnancies, poor parenting, sexual promiscuity, drug availability, too early marriages, job competition, high technology, poor education, and inflation.

F. **The Era of Societal Decisions**. Even more recently, input into assistance with national as well as personal health care decisions has been departing slowly but more obviously from the province of the physician. As was noted, health care entered the scientific-physician era, moved to the point of more self-decision and personal control over health care and now stands clearly at or just beyond the threshold of the impact of social medical decisions. It probably is correct that insofar as major advances in health care are concerned—major in the sense of affecting large numbers of people—it is now as likely that advances will occur by way of the legislative arena or ballot box as from what has come to be expected from basic scientists and physicians. Laws affecting driving speed, the use of seatbelts or child restraints, the age of legal drinking of alcohol, the labeling on packages of food, the safety of home and work place products, the cost of health insurance, the conduct of research, the areas for research, the minimum wage, workmen's compensation, the provision of food and nutrients through governmental programs, national health insurance, abortion, and contraception are as likely to have as great a bearing on the public's health as that of the traditional medical establishment. No longer will one physician and one patient face each other in a vacuum, but rather in the context of an increasing number of laws and regulations about health and health care. Society and not just medicine alone will have to resolve questions affecting the public's health. Health care personnel will be in an advisory role and should provide enlightened leadership; but society will have to choose between various expensive alternatives and will have to decide what is best, healthiest, and most economical for the majority.

II. **PROBLEMS AND TRENDS**. We have become an altogether healthier society. Children born today can expect to live longer (approximately 74 years).[9] Young people are having fewer children and the birthrate is slowly falling even as the life span is increasing. By the year 2000 only 28% of the U.S. population will be under 20, another 28% age 28-39, but another 17% over age 60.[3]

Midlife medical calamities are affecting fewer and fewer people, but when they do occur, more extensive therapies are being brought to bear upon the small number of people affected. One of the first steps in this trend occurred with the establishment of nationwide renal dialysis centers. Medical science came together with national legislation, that, while unquestionably providing better care, became one of the most extensive and expensive networks ever to be established—and for the benefit of an extremely small number of people. The dilemma financially, is how to provide for the technically expensive needs of a small sick segment of the population who would otherwise die. Earlier, before the renal dialysis center networks were fully established for all kidney patients, there were the moral and ethical decisions of who with kidney disease should receive treatment and live and who should do without and die. Today there are several treatment modalities undergoing the same evolution. One of these is liver transplantation. Each transplant is said to cost $50,000 to $100,000 or more and even when successful, benefits only a tiny segment of the population. While the individual patient may be benefited, it is much more difficult to judge the overall benefit to society. Certainly new scientific information is obtained from these efforts but this type of research tends rapidly to become standard treatment and causes health care costs to continue to increase. An important related question is whether the general public should support indirectly (through health insurance) what initially and in reality are research efforts or whether they should be supported directly through governmental research funds at least until the more expensive experimental phase is over.

Fewer children, healthier mid-years, more older people, and concern for increasing costs for conditions and diseases that affect few people, coupled with increasing numbers of physicians (predicted to be over-supplied by 1990)[10] will bring about several changes, some of which already are visible. There will begin to be and there will be increasingly, competition among physicians for a smaller number of the relatively well young and middle-aged patients. This will be most evident in the larger metropolitan regions where physicians are disproportionately in greater numbers. Smaller and rural communities will begin to see a greater influx of various specialized physicians and greater competition will appear there in the next few years. Obstetricians will become pressed to see the number of patients that will support their practices. General pediatricians will come to deal with children who have, in the main, only minor diseases and overall there will be fewer such children as the birthrate falls.

Compensation for physicians must inevitably be reduced since more will be vying for a smaller portion of the pie made smaller (despite an increase in population), in part, by the "wellness epidemic." Physicians will begin to bargain with segments of the population to supply their medical care in a contractual manner. Many physicians will seek the protection of organizations such as hospitals where they will be salaried or guaranteed a minimum income in return for service rendered to the hospital (similar to emergency room physicians) or in return for referring patients to a particular hospital. Physicians may well be polarized into those who join with an organization (hospital, HMO, government) vs. those who try to remain staunchly independent. In all cases, however, physician income whether by salary or by fee-for-service should stabilize or be less.

Hospitals will have difficult problems. The curbing of hospital costs by government and industry paying specified amounts for care, plus the trend of sharing an increased amount of the health insurance premium with the consumer, will result in beds remaining empty in hospitals previously anxious to expand. The good health-prevention-eradication-self-care movements plus innovations like outpatient surgery will combine to pressure hospitals to become more efficient and to join with other hospitals in cooperative chains or groups along for-profit, non-profit, religious, or other lines. As many as 20% of the approximately 7,000 United States hospitals may either close or significantly change their function. A few true medical centers may arise in sparsely populated areas, whereas urban hospitals may trade off their services and scale down beds and staffs. At the least, levels of care by hospitals will become better established. The concept of regionalized hospital care should become a reality. This is likely to be seen first in for-profit chains of hospitals where a small general hospital in the chain will supply complicated patients to their larger same-chain hospital—this being relatively easy because many physicians will be largely tied to the hospital system for reasons already mentioned. There will be small general hospitals, referral centers, and research centers, the latter primarily connected with universities. Hospitals will require fewer nurses and other staff and the hospital industry will cease being a growth industry insofar as employment is concerned.

The "mix" of physicians coming from medical schools is likely to be many years adjusting to the need or to the requirements of the population. The most popular areas chosen for specialization by new medical graduates are still internal medicine and surgery, and it is generally these over-crowded fields which will first bring physicians into a more competitive stance. Because it takes a number of years for society's medical needs to be translated into physician graduates, there may be a period of six to 10 years before graduates will seek to fill the predicted needs as geriatricians, physiatrists, psychiatrists, occupational health specialists, family practitioners, and preventive medicine specialists. In the meantime, the problem of excess numbers of physicians in a sub-specialty field could be ameliorated by professional societies limiting the number of physicians to be trained in that field (for example, neurosurgery or cardiology). In addition, medical schools will begin to reduce the total number of medical students that will be allowed to enroll.

Despite an increasing cadre of physicians and despite more availability and competition, there will still be a problem in supplying adequate health care for the 28 million Americans (12% of the population) who are poor and members of minorities (blacks, Hispanics, inner-city ghetto inhabitants, isolated rural elderly) or who are unemployed or uninsured.[11] One solution to this problem could be by way of governmental programs which would supply medical care through the network of established city-county-state health departments or through a modified nationalized health service (government salaried physicians) or both. Many young physicians, finding themselves unable to compete successfully in the crowded marketplace, might respond enthusiastically to the prospect of a guaranteed income.

New arrangements for health care will arise. Physicians will be linked to hospitals; hospitals will be related to each other according to the complexity of services offered; patients will be joined to physician and hospital by insurance plans which favor particular physician-hospital linkages and which offer the consumer or employer of the consumer a lower cost. Such physician-hospital-patient-insurance arrangements will compete with one another and the competition will be stimulated by industry and by government both seeking to control costs.

Basic science and bioengineering advances will continue to be astounding. The fruits of genetic engineering are just coming to pass. The door is now open for more potent drugs, for further incorporation of computers into life-support systems, and for development of physical techniques that allow more non-invasive diagnostic studies. The quite remarkable and even startling magnetic imaging machines which involve no irradiation,

the conquering of tissue rejection and transplant operations, the manufacture by bacteria of human insulin are but three of the signal events which will dictate even further specialization of at least a few physicians required to obtain and manipulate this new information and these new techniques.

Caveat. One of the factors that must be considered constantly in a changing medical world concerns the maintenance of quality health care. Without doubt, the majority of the American public enjoys the best level of health care ever, however unevenly that care is distributed. As cost of care becomes even more important, there easily could be tendencies to cut corners by not rendering in-depth care, by not referring patients who need to be referred, by discharging patients from hospitals earlier than is desirable for good care, or by employing the services of persons who are either marginally trained or totally untrained, but who hold themselves out to be acceptable health care workers when they are not. The public frequently does not know and cannot be expected to know enough to choose between honest cost-saving care and that which may cost less but which is also distinctly of lesser quality and may even be life-threatening. It is in this environment that promises of cheaper care must be examined closely. It is shortsighted to place cost of care entirely above quality of care. With the advice of conscientious health professionals, it should be possible for American society to make educated choices relative to costs and quality.

A lean, efficient, and responsive health care system will be able to continue to build upon the scientific-technical base for our ever-improving health care and at the same time, successfully address the challenges of high costs and the need for accessible care of acceptable high quality. It will take the understanding and the best efforts of physicians, economists, administrators, and legislators to bring this about, but it can and must be done in as enlightened a way as possible if past gains in health care are to be continued into the future.

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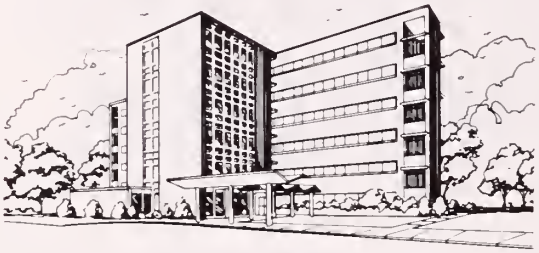

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Current Emergency Diagnosis & Treatment, Second Edition

Edited by John Mills, MD, Mary T. Ho, MD, Patricia R. Salber, MD, and Donald D. Trunkey, MD, Lange Medical Publications, 1985

Two years have passed since the birth of this book and rightfully a place in every emergency room has been earned. Set in purpose to give the front line physician immediate and reliable references for the spectrum of medicine that will be encountered, this book uses several useful techniques to facilitate this. Each of the initial 14 chapters is headed by an outline, paged and highlighted, of the succeeding contents. Soon follows algorithmns to guide the course of thinking and action. If not committed to memory by experience, certainly at a glance one could proceed by paths that lead to diagnosis and treatment. In extremis such logic can be evanescent unless tabulated.

That the emergency room has always been the repository of trauma and acute medical emergency is accepted. For the first half of the book, systematically each organ system is represented by its respective emergent problems.

Helpful diagramatic drawings, spiced with actual x-rays and tables, are helpful. Explanations are succinct, treatments are basic and not compared, and triage to specialty care is guided.

Subsequently toxins, physical agents (burns, smoke, inhalations) and other environmental villains are discussed. Several revised chapters in the section on environment emergencies, marine malevolents and poisoning protocols predict our growing return to nature.

Curiously chapters on wound care and procedures (diagnostic and therapeutic) occupy the end of the book, instead of the beginning considering their relevance to daily emergency room care.

Predictably new infectious disease emergency discussions include AIDS and herpes virus diagnosis and management, a woeful reminder of our latest plagues.

Recent environmental holocausts make the chapter on mass casualty and shock management very germane.

Finally, apropos, legal aspects of emergency care are accorded a separate chapter - a cogent reminder to all who tread here.

Those of us no longer in the emergency room are reminded that any day the call to return to the front line may be issued. Reading such a book, having it at hand, is such a relief.

Practice Enhancement
The Physician's Guide to Success in Private Practice

Greg N. Korneluk, Macmillan Publishing Company

Greg Korneluk, formerly a practice management specialist with the American Medical Association and with his own institute, writes this quite readable book. Although now one of many in this field, this book does discuss the establishment, maintenance, marketing and tribulations of practice, particularly to the private physician.

Despite intellectual repugnance to terms such as "marketing techniques," "new competition," and patient retention, this reader read on through more palatable sections on improving waiting rooms, business office structure and furniture, computers, billing and accounting.

Overall, though magazines on nightstands are filled with articles of such material, to have all this information bound together is a service at a modest price of $23.50.

The Physician and the Hopelessly Ill Patient

Society For The Right to Die, 1985

Ten distinguished physicians from the country's leading teaching centers and a noted legal expert collaborated on this publication. From the *New England Journal of Medicine* of April 12, 1984 article, "The Physician's Responsibility Toward Hopelessly Ill Patients" came the impetus for this handbook. At a Boston conference these physicians gathered to develop guidelines for medical care appropriate and ethical for patients with no reasonable hope of recovery. Their findings and conclusions are the first section, with recommendation of care at each level of illness. Physician - patient and - family interrelationships constitute part of the decision process.

Section II has 14 questions and answers tabulated with legal explanations of the state of the law.

Finally, state by state, laws enacted, precedents established and cases adjudicated are presented. Case law with implications and references are there for citation.

What role the Society for the Right to Die has, represented by the legal author in this book, for us in medicine is for the individual to decide.

Nevertheless as a source work and a provocateur of discussion, the $5.00 purchase makes it a must.

Correlative Neuroanatomy & Functional Neurology

Joseph G. Chusid, Lange Medical Publications 1985

Dr. Joseph Chusid has singly edited this 1985 edition. Packed into 513 pages are more than 500 illustrations and 65 tables, a glossary, laboratory standards, lists of classic reference textbooks and a 20 page index!!! Yet despite such statistics, or because of them, this book is an excellent beginning for the student and refresher for the experienced.

Initially basic neuroanatomy with drawings as guides is presented. Detail is sufficient without the risk of ennui. Clinical correlations spice up the descriptions.

With this background as prerequisite, diagnostic techniques are explained. Testing at the bedside, the thread connection with predecessor neurologists, is well demonstrated. Labs take the fluids and pieces, make determinations, which information is explained in tables and other guides. Modern technology - the EEG, electromyograph, CT and brain scans - give the neuroscientists strong and dramatic tools.

Disorders of the nervous system, though mentioned before, are systematically presented. The section on infections is the only part not written by the author. Congenital defects, vasculopathies, trauma and tumors are extensively described. Degenerative, metabolic and toxic problems are well illustrated and tabled.

Specific presentations of epilepsy, syncope, coma, and headache are accessible to quick review for such frequent problems.

Succinct, uniform in presentation and flow, and packed with what you need to know - a good book to have.

Stephen Z. Smith, M.D.
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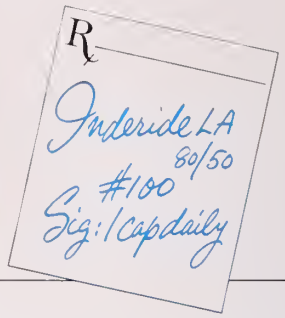

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CARDIAC FAILURE. Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely; or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following abrupt discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned, the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patients should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS. Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY. The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema). PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide:
Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL®):
GENERAL. Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS. Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS. Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY. Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY. Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS. Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE. Safety and effectiveness in children have not been established.

Hydrochlorothiazide:
GENERAL. Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis when severe cirrhosis is present or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS. Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY. Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS. Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL®):
Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular. Bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System. Lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal. Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic. Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory. Bronchospasm.

Hematologic. Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune. In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous. Alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:
Gastrointestinal. Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice), pancreatitis, sialadenitis.

Central Nervous System. Dizziness, vertigo, paresthesias, headache, xanthopsia.

Hematologic. Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia.

Cardiovascular. Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity. Purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis, cutaneous vasculitis), fever, respiratory distress, including pneumonitis, anaphylactic reactions.

Other. Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness, transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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KMA Sponsors First HMSS Meeting

KMA's Hospital Medical Staff Section held its inaugural meeting in the KMA Headquarters on November 20, 1985. Representatives of 46 hospitals attended the program which had William W. Hotchkiss, M.D., Chairman of the Board of Trustees of the American Medical Association, as its keynote speaker. Introduced by Wally O. Montgomery, M.D., KMA's President, Doctor Hotchkiss discussed recent changes in JCAH Accreditation Standards which have a direct impact on activity at the hospital staff level.

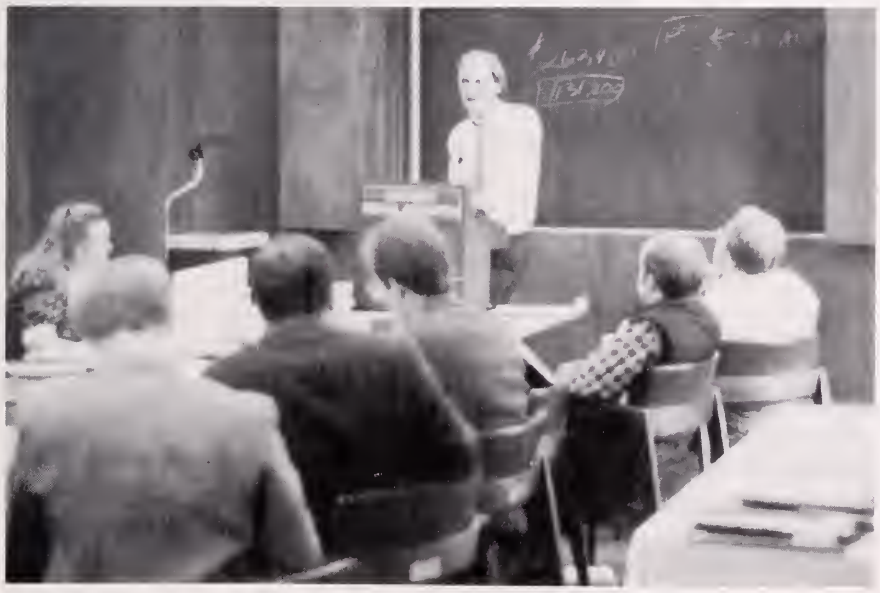
From left to right: Wally O. Montgomery, M.D., KMA President; B.J. Anderson, Associate General Counsel of the AMA and William B. Monnig, M.D., Chairman, KMA/HMSS Steering Committee.

B. J. Anderson, Associate General Counsel of the American Medical Association, spoke on the legal relationship between a hospital's medical staff and its governing body. Presentations were followed by a lengthy question and answer session which was particularly informative to the HMSS representatives.

Plans for upcoming HMSS activities center on an annual gathering, to be held in conjunction with KMA's Annual Meeting. Medical staffs of hospitals not represented at the November 20 meeting should elect a KMA member from their number to represent them in the future. Contact the chief of staff at your hospital or call the KMA Headquarters for additional information.

KMA's Third Practice Management Workshop Draws Favorable Response

"An absolute necessity!" "I would recommend to anyone getting ready to begin practice." " . . . informed me of the day-to-day nuts and bolts of running a private practice."



Guest Speaker, T. Kennedy Helm, III, Attorney, Stites & Harbison

These are samples of the comments made by the 26 participants attending KMA's third "Preparing for Private Practice Workshop" held November 21–22 at the KMA Headquarters in Louisville. Physicians, spouses and office managers, many of whom will be setting up practice for the first time, heard various speakers cover the steps required to establish and effectively manage a medical office.

The two-day program included presentations by professionals in the areas of accounting and tax considerations, personnel management, legal aspects, insurance requirements, claims filing and other practice management basics.

Youth Education Program

The KMA Subcommittee on Youth Education has made considerable progress in the development of a drug, alcohol and tobacco interdiction program which could be beneficial to all Kentucky schools. Included as an integral part of this program is the enhancement of student self-image and esteem.

The Subcommittee has now developed resource packets, at four different levels, for speakers' use. These are (1) elementary age, (2) middle school age, (3) high school age, and (4) parent groups. Material is being secured for these speakers' kits, and the members of the Subcommittee on Youth Education will be seeking financial assistance to augment KMA funds for purchasing an adequate supply of materials for speakers to distribute to program participants.

This program is being promoted, in cooperation with the Department of Education, through letters and publications to Kentucky school counselors, principals and PTA organizations; through the Auxiliary to KMA; and by providing information to KMA members via the *Journal*, "The Communicator," and by corresponding with county medical society secretaries and chiefs of staff of Kentucky hospitals.

The Youth Education program is one of the best public relations efforts KMA has ever undertaken and comes at a time when participation could have a tremendous influence in the attitudes of Kentucky's youth and parents, and in the public's attitude about the medical profession.

KMA is developing a list of physicians and Auxiliary members who would be willing to take a relatively small amount of time from their busy schedules to speak to a classroom of children, a PTA group, a football team, etc., as requests are received by the KMA office. Provided at the bottom of this page is a form which can be clipped and mailed to the KMA Headquarters Office to indicate your willingness to assist in this worthwhile endeavor. Won't you help?

YOUTH EDUCATION PROGRAM

I will serve as a physician volunteer for the KMA Youth Education Program, as time permits.

(Please print or type)

Name _____

Mailing Address _____

_____

Phone _____ County _____

Return completed form to: Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, KY 40205
ATTN: Subcommittee on Youth Education

"WHAT IS KEMPAC?"

K. THOMAS REICHARD, M.D.

All Kentucky physicians owe a significant debt to 1,100 KMA members and spouses. They have helped protect our profession, insure our voice in the legislative arena, and maintain the profession's influence on its own destiny. These 1,100 physicians and their spouses are members of KEMPAC for 1985.

KEMPAC (The Kentucky Educational Medical Political Action Committee) is the political arm of the Kentucky Medical Association. KEMPAC receives its funds through its members' dues and these funds are then used to support political candidates.

Today medical practice is in trouble; not organized medicine but the future of medicine. The cost of care and the high expectations from the public have directed legislative interest to everything from mandatory counseling on cancer treatment alternatives to the imposition of physician fee schedules for private pay patients. This interest by legislators is not an alarmist castigation of physicians but the response of representative legislators to real problems being voiced by constituents. As a result, medicine's legislative confrontations are severe. Legislative and regulatory issues are increasingly complex and are made worse by the universal pressure to reduce governmental expenditures. Traditional allies are becoming hesitant to automatically support medicine's positions, single issue groups have intensified legislative pressure and the operation of legislatures themselves has changed with legislative independence being the order of the day.

Your County Medical Society, KMA and the AMA are your voice in response to this situation and 1,100 of you cared enough to support that voice this year. In the past, those of you who were concerned enough about our medical future to join KEMPAC have been very successful. Through your support, 90% of the candidates for the Kentucky General Assembly in the past election aided by KEMPAC won their elections. However, that voice needs to become much stronger because in 1986, elections will be held for 100 Representatives and 19 Senators for the Kentucky General Assembly as well as the seven U.S. House seats and one U.S. Senate seat.

In this milieu your support for KEMPAC/AMPAC activities is not just being solicited, it is crucial. Medical practice is not seen in the legislative arena as a prestigious scientific activity but as a simple dollars and cents budgetary issue that is relegated to the terms of a relative fiscal priority. The maintenance of the tradition and professionalism of medical practice can only be accomplished by your active timely support. **PLEASE JOIN KEMPAC/AMPAC NOW.**

Members in the News

David A. Hull, M.D., Lexington, received the Ward O. Griffin award at the chief residents of surgery banquet at the University of Kentucky Medical Center. The award is given on special occasions to a member of the U of K Clinical Faculty. Doctor Hull is a graduate of the University of Tennessee School of Medicine and past president of the KMA.

William V. Banks, M.D., Covington, has been named Vice President for Medical Affairs at the Saint Elizabeth Medical Center in Covington. Doctor Banks is currently the president of the medical staff at Saint Elizabeth and previously served as vice president. He is a graduate of the University of Kentucky College of Medicine and a member of the KMA and the Kentucky Chapter of the American Academy of Pediatrics.

KMA Physician Placement Service

Physician Placement is another service offered by the Kentucky Medical Association. The Association acts as a clearing house for anyone searching for a physician or a physician seeking a practice opportunity. A booklet entitled "Practice Opportunities in Kentucky" is published every January and revised in July. In it are listed the various opportunities available in the State of Kentucky along with the name of the person to contact. KMA also publishes monthly a "Physician Seeking" list, which is disseminated to communities, hospitals, and physicians who are recruiting.

If you are interested in these KMA services, please contact the Physician Placement Office, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205; telephone: 502-459-9790.

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All advertisements must be approved by the Board of Editors. Deadline is the first of the month two months preceding the month of publication. Charges for advertising are: 20¢ per word. Average word count: 7 words per line. $5.00 minimum. Send payment with order to: The Journal of KMA, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

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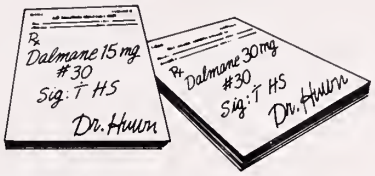

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Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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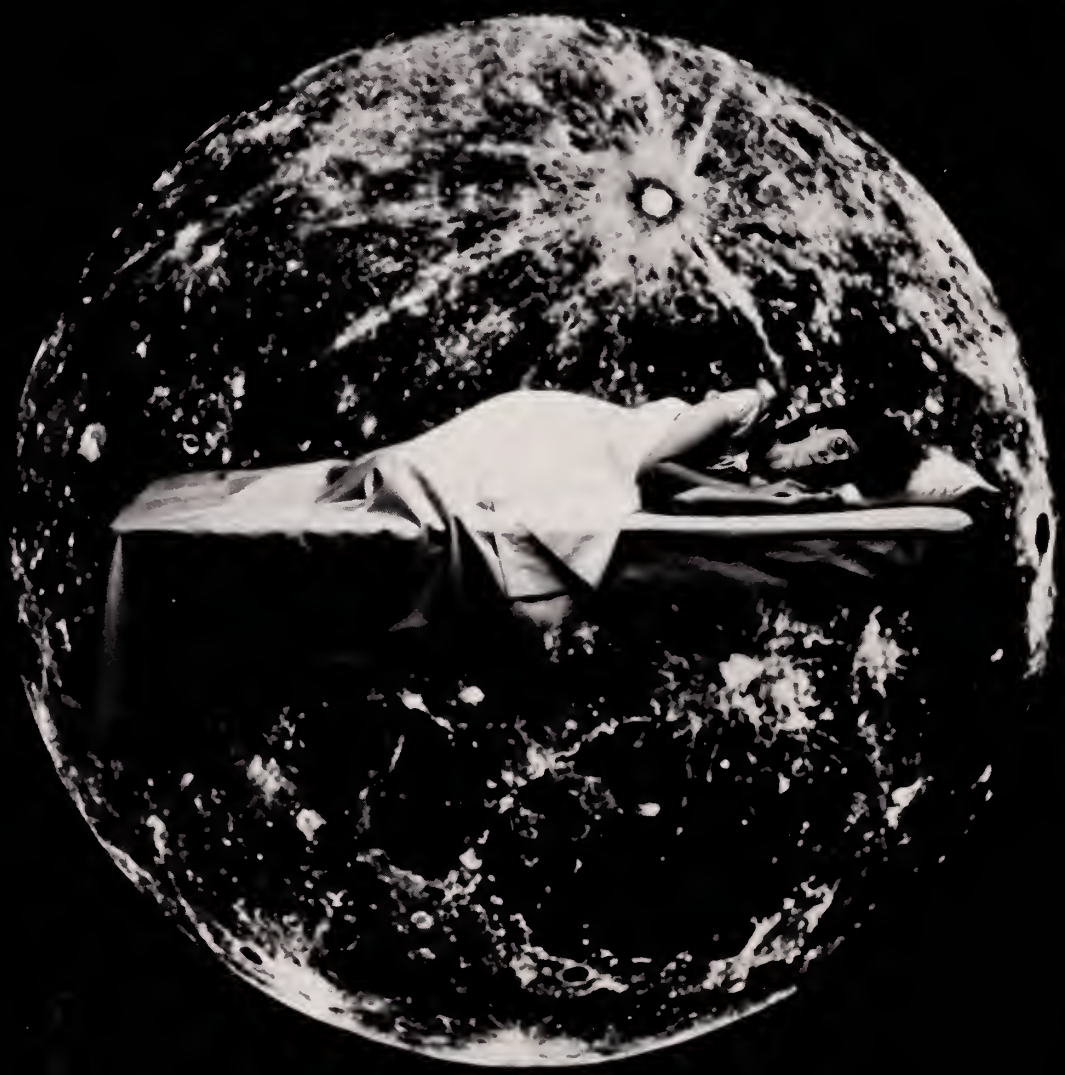

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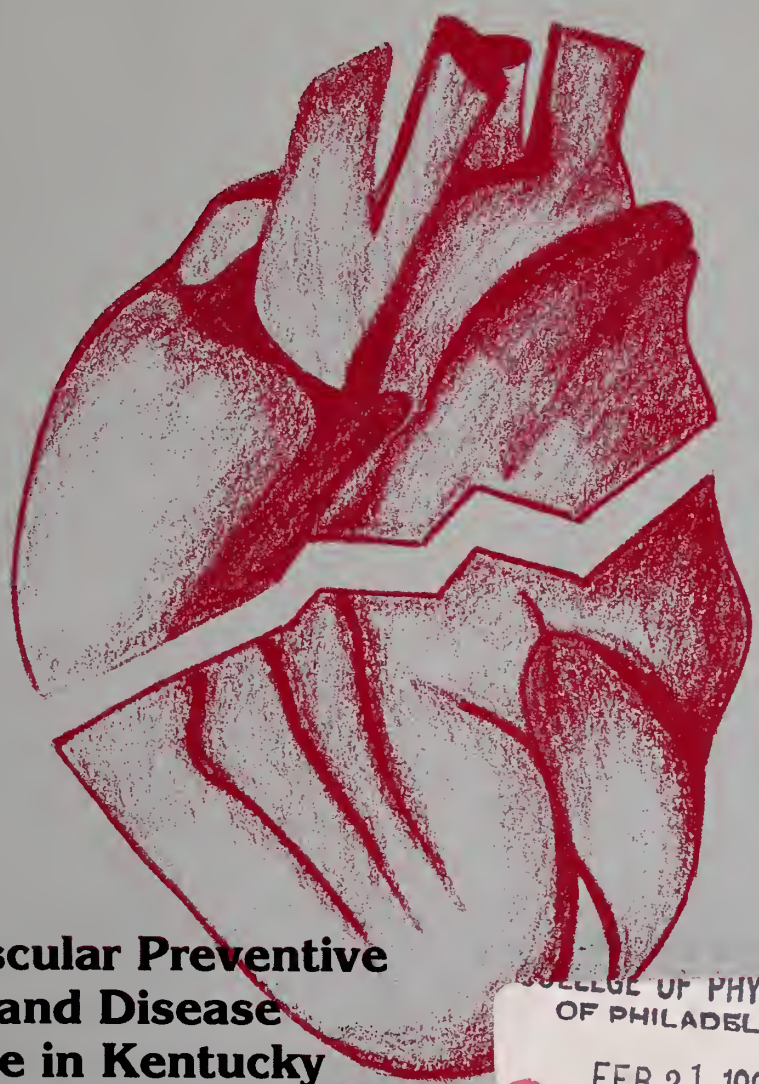

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As you consider professional liability insurance, consider this. The coverages stated in the policy are basically a promise — a promise to be here when needed regardless of legal climate or economic conditions. A company's ability to keep this promise is critical because your financial security may depend on it. Unfortunately, too many firms are now finding the task impossible.

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14th .... RONALD D. HALL, M.D., Town & Country Center, Pikeville 41501 (606) 432-5532 1986
15th .... EMANUEL H. RADER, M.D., P. O. Box 70, Pineville 40977 (606) 337-3559 1987

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DIABETES IN CHILDREN

Today and Tomorrow
March 22, 1986
Park Mammoth Resort
Park City, Kentucky

speakers

Allan Drash, M.D.
Children's Hospital of Pittsburgh

Michael Foster, M.D.
University of Louisville,
School of Medicine

Margaret Cook-Newell, M.S.R.D.
WEDCO District Health Dept.
Kentucky Diabetes Control Program

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DISTINCTIVE DESIGN 0.5, 1.0 and 2.0 mg

Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Transient amnesia or memory impairment has been reported in association with the use of benzodiazepines.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Ativan® (IV)
for (lorazepam)
Anxiety

DOSAGE: Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.

HOW SUPPLIED: 0.5, 1.0 and 2.0mg tablets.

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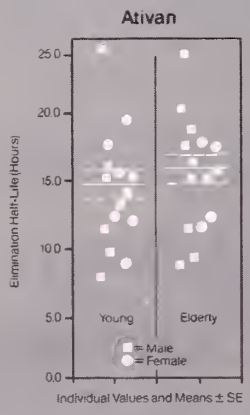
Only Ativan® (lorazepam) CIV

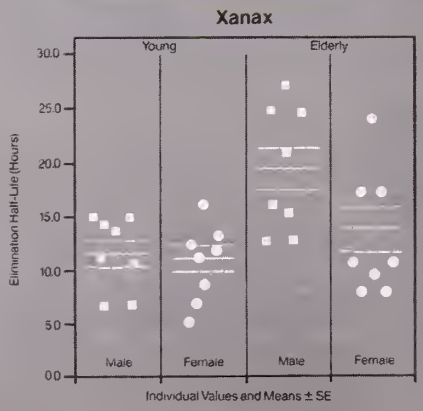
among leading benzodiazepines, has proof that its pharmacokinetics are not significantly altered by age.[1]

With Ativan, elimination half-life was very similar between young and elderly groups tested; differences did not approach statistical significance.[1]

Comparison of elimination half-lives in young and elderly subjects.



Ativan® (lorazepam)[2]
Ativan®, which is *conjugated* rather than oxidized, shows little difference in half-life (t ½) between young and elderly subjects.



Xanax® (alprazolam)[3] CIV
Xanax® requires *oxidative* (P450) metabolism; significant differences in half-life are shown between young and elderly male subjects; half-life is minimally influenced by age in women.

References:
1. Greenblatt DJ: Clinical study, pharmacokinetics and bioavailability in the elderly, Ativan® (lorazepam). Data on file, Wyeth Laboratories.
2. Greenblatt DJ, Allen MD, Locniskar A, et al: Lorazepam kinetics in the elderly. Clin Pharmacol Ther 26:103, 1979.
3. Greenblatt DJ, Divoll M, Abernethy DR, et al Alprazolam kinetics in the elderly. Arch Gen Psychiatry 40:287, 1983

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Philadelphia, PA 19101

See important information on preceding page.

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PRESIDENT'S PAGE

The Other Side of the Story

A famous newscaster, Paul Harvey, routinely has a news story in which he tells details of an episode in history which may not be well known. Much of the national media considered only the sensational actions of the AMA House of Delegates Interim meeting held in Washington in December. Those issues concerned tobacco and boxing and are well known from your reading of American Medical News and your local papers along with radio and television reports. But of much more value to you is a wide variety of issues confronted by the AMA House of Delegates. These issues represent the other side of the story and one of much more significance to the practicing Kentucky physician.

Reimbursement for Administrative Duties

The resolution submitted by your Kentucky delegation at the request of the KMA House at our Annual Meeting was considered favorably in the reference committee on Amendments to Constitution and Bylaws. This resolution proposes that the AMA adopt the position that a physician is entitled to charge a fee to third party payors for the administrative services involved in fulfilling the requirements imposed by third party payors, such as preadmission and presurgical authorizations and other forms required before payment is approved. This resolution also represented changes in ethical opinions consistent with the position described. This resolution was referred to the AMA Board of Trustees for study with a report to the House at the 1986 Annual Meeting.

Medicare Fee Freeze

The Medicare Fee Freeze caused much discussion with the delegates taking a number of actions in an attempt to gain some measure of relief:

1. A resolution urging county, state, and specialty medical societies to help the AMA in continuing an aggressive activity, both legislative and judicial as appropriate, to eliminate the discriminatory action of Congress in imposing an unfair **control of charges** for physician services under Medicare.
2. A policy directing the AMA to intensify efforts to increase public awareness of the deleterious effects of the Medicare fee freeze on continued accessibility to physicians of the patient's choice.
3. A resolution asking the AMA to continue to oppose and seek repeal of the unnecessary attestation statement on hospital medical records of all Medicare beneficiaries.

Professional Liability

The House directed that the search for solutions to the liability crisis continue as the highest priority of the Association. The AMA Committee of Professional Liability submitted a report that presented some chilling facts on the costs of professional liability.

- 14.5% to 17.5% of the $75.4 billion spent on physician services in 1984 represent costs generated by the current professional liability system.
- The committee also reported that indirect costs of defensive medicine is estimated to be $17.5 billion and the loss of physician income for time on depositions and trial is estimated to be another $40 million.

As you know we in Kentucky are involved with legislative activity as this article goes to press and we hope soon to be able to report to you a successful state bill which may bring some relief to this pressing problem.

State Licensure and Medicare Participation

The House learned that the AMA joined with the Massachusetts Medical Society in a suit opposing a new state law tying state medical licensure to Medicare participation and the House overwhelmingly expressed opposition to this law.

The House adopted a policy statement calling on the association to:

- maintain its vigorous opposition to the Massachusetts legislation
- strongly affirm the policy that medical licensure should be determined by educational qualifications, professional competence, ethics and other appropri-

ate factors necessary to assure professional character and fitness to practice

- oppose any law that compels either acceptance of Medicare assignment or acceptance of the Medicare allowed amount as payment in full as a condition of state licensure.

Funding of Graduate Medical Education

The House adopted a comprehensive report submitted by the AMA Council on Medical Education that examined the current modes of funding graduate medical education and the proposed Medicare legislation affecting GME funding.

The report contained nine principles to guide the AMA in responding to legislative proposals and other challenges to the graduate medical education system.

1. Graduate medical education is an essential component of the education of all physicians. The health and well being of the American people are directly benefited by the graduate medical education of physicians. Societal contributions to the financing of graduate medical education are appropriate.

2. The education of physicians in graduate medical education and the clinical care of patients are inextricably linked. Teaching hospitals should be fully reimbursed for the reasonable cost of residents' salaries and fringe benefits.

3. All payers of patient care costs should support graduate medical education in the institutions in which care for their beneficiaries is delivered. Support for both direct and indirect costs must include residents assigned to ambulatory care sites that are essential components of educational programs.

4. Funding from multiple sources should be available to support residency training programs.

5. Resident physicians should not be permitted to bill directly for patient care services.

6. In a period of fiscal constraint, first priority for Medicare funds for residents' salaries and fringe benefits should be accorded to graduates of medical schools accredited by the Liaison Committee on Medical Education or the American Osteopathic Association. Cessation of support for foreign medical graduates should be phased in over an appropriate time period.

7. Medicare legislation should not be the vehicle for the establishment and implementation of national physician manpower policies. If required, physicians manpower policies should derive from a careful, deliberative process in which educators, the medical profession, and the public participate.

8. Residents should be compensated reasonably in all programs throughout the nation. Uncompensated and undercompensated positions should be discouraged.

9. Reimbursement for patient care by all payers must be adequate to sustain the nation's teaching hospitals. Adequate indirect cost payments under Medicare should be continued. Government must consider and fund separately the care of the nation's indigent.

Therapeutic Substitution of Drugs

The House adopted a report describing AMA activities in monitoring state legislation that would authorize pharmaceutical or therapeutic substitution of a physician's prescription. The report also provided examples of therapeutic substitution that may result in harm to patients. The House affirmed AMA policy to vigorously oppose any concept of prescription drug substitution without the prescribing physician's authorization.

Conclusion

AMA House meetings provide a unique educational opportunity and I would encourage you to attend and participate. Any member of the Association may present testimony at the Reference Committee hearings and, of course, corridor discussions on the issues provide additional opportunities to get your views across. One Kentucky physician present for the first time at an AMA meeting was very surprised and impressed with the scope of activities of the House of Delegates.

If you can't come to the meeting you can still be represented through your delegate. Let your delegation know your opinions. You can also prepare a resolution and request that it be submitted to the House. Many AMA policies began with an individual physician who had a good idea and coaxed it through the democratic process.

I personally appreciate the more than nine years in which I have been an alternate delegate to the AMA and believe the experience to be a very significant factor in my professional life. Thank you for allowing me to serve you in this capacity.

Wally O. Montgomery, M.D.
KMA President

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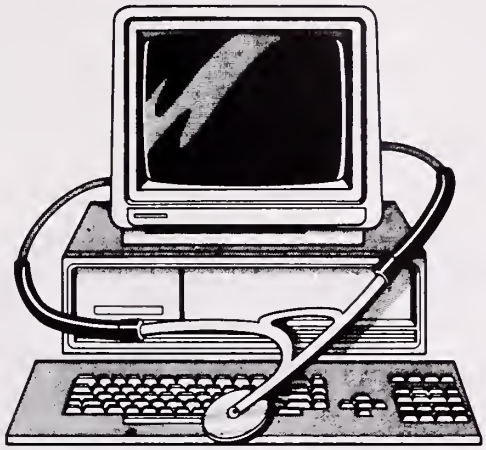

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The world's leading beta blocker and diuretic—for once-daily convenience without compromise

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24-hour blood pressure control with the broad benefits of INDERAL (propranolol HCl)

The controlled-release delivery system of INDERIDE LA provides 24-hour beta blockade and the broad cardiovascular benefits of INDERAL with a single daily dose. Compliance is enhanced because once-daily administration fits easily into patients' daily routines.

Plus standard-release hydrochlorothiazide, the thiazide of choice for comfortable morning diuresis

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—an established, effective daily dose of standard-release hydrochlorothiazide—50 mg

New once-daily INDERIDE® LA

Each capsule contains propranolol HCl (INDERAL® LA), 80 mg, 120 mg, or 160 mg, and hydrochlorothiazide, 50 mg

Convenience without compromise

80/50 120/50 160/50*

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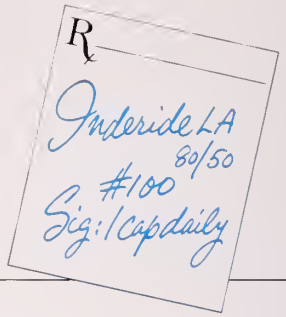
Please see following page for brief summary of prescribing information.

Once-daily
INDERIDE® LA

Convenience without compromise
One capsule—Once daily

80/50 120/50 160/50*



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INDERIDE® LA Brand of **PROPRANOLOL HYDROCHLORIDE (INDERAL® LA) and HYDROCHLOROTHIAZIDE (Long Acting Capsules)**

No. 455—Each INDERIDE® LA 80/50 Capsule contains

Propranolol hydrochloride (INDERAL® LA)	80 mg
Hydrochlorothiazide	50 mg

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Propranolol hydrochloride (INDERAL® LA)	120 mg
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No. 459—Each INDERIDE® LA 160/50 Capsule contains

Propranolol hydrochloride (INDERAL® LA)	160 mg
Hydrochlorothiazide	50 mg

INDERIDE LA is indicated in the management of hypertension.

This fixed-combination drug is not indicated for initial therapy of hypertension. If the fixed combination represents the dose titrated to the individual patient's needs, therapy with the fixed combination may be more convenient than with the separate components.

CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL®):
Propranolol is contraindicated in: 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide:
Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL®):
CARDIAC FAILURE. Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely; or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned, the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patients should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS. Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY. The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema). PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide:
Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL®):
GENERAL. Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS. Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS. Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY. Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY. Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS. Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE. Safety and effectiveness in children have not been established.

Hydrochlorothiazide:
GENERAL. Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS. Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY. Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS. Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL®):
Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular. Bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System. Lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal. Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic. Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory. Bronchospasm.

Hematologic. Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Autoimmune. In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous. Alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:
Gastrointestinal. Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis, sialadenitis.

Central Nervous System. Dizziness, vertigo, paresthesias, headache, xanthopsia.

Hematologic. Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia.

Cardiovascular. Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity. Purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis, cutaneous vasculitis), fever, respiratory distress, including pneumonitis, anaphylactic reactions.

Other. Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness, transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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Resuscitation and Transfer of Trauma Patients: A Prospective Re-Evaluation

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Aggressive resuscitation of trauma patients decreases morbidity and mortality. An earlier prospective study was conducted by us on 100 consecutive patients transferred to our trauma center in 1980 from 18 emergency departments. It documented noncompliance with accepted standards of the American College of Emergency Physicians and the American College of Surgeons Committee on Trauma in over 70% of the cases. We now report a prospective study of 100 consecutive patients transported to our level 1 trauma center in 1983. In all cases, initial treatment was by a physician in an emergency department. The study group includes patients from 23 hospitals, five more than previously. Prior notification of transfer was received in 93 patients, in contrast to 43 in the earlier study. Thirty-nine were transported by helicopter, versus none previously. Noncompliance with accepted standards for patients with multisystem (66), CNS (60), chest (32), or orthopedic (37) trauma averaged 27%. Factors potentially responsible for the improvement include: 1) a marked increase in the number of residency trained (19) and career emergency physicians practicing in the referring hospitals, 2) implementation of regional training programs, and 3) availability of rotorcraft aeromedical transport by trained personnel.

Trauma, still the leading cause of death in patients under 40, has appropriately been referred to as "the neglected disease of a modern society."[1] Immediate aggressive resuscitation of patients and rapid transfer of selected patients to regional trauma centers improves outcome.[2-6]

Adequate stabilization and rapid transfer to a level 1 trauma center will improve outcome in the 5-7% of traumatized patients requiring those facilities. In Houtchins series, failure to recognize and treat serious injuries resulted in a disproportionately higher mortality rate for rural trauma victims.[7] In Certo's series in a rural state, it was felt initial bypass to a regional trauma center prior to stabilization would not be effective.[8]

It is more critical for the referring physician to determine which patients will need an increased intensity of care after proper stabilization than to make the correct diagnosis. Simply insuring adequate oxygenation, ventilation, and perfusion may decrease the mortality of multiple trauma patients.[9-11] An organized approach in the management of trauma involves establishing priorities. They include ventilatory support, control of external hemorrhage, fluid resuscitation, diagnosis and treatment of internal hemorrhage, fracture splinting, and appropriate consultation and transfer.[12]

After evaluating the unique circumstances of trauma care in our locale, steps were taken to improve care in the critical first hour.[13] Our institution is a level 1 trauma center surrounded by rural counties. This study was undertaken to evaluate the efficacy of our strategy to improve early trauma care in our area.

FIGURE 1

Trauma Patient Transfer Study:
Patient Name: _____ **Tag #** ____
Hosp # _____
Transport Method: ALS Support Unit _____
Basic Life Support _____
(Ambulance _____ **Helicopter** _____**)**
ED Called by Transferring MD: Yes ____ **No** ____
Front sheet sent with appropriate data:
HX _____ **VS** _____ **Exam** _____
Appropriate Lab:
Blood _____ **X-rays** _____ **Other** _____
Narcotics Given _____ **Vasopressors Given** _____
Basics: IVs _____ **Bore size** _____
Fluid type & volume _____
NG at risk _____ **secure** _____
Airway/O_2 at risk _____ **secure** _____
Foley/chest tube at risk _____ **secure** _____
Positioning: Neck at risk _____ **secure** _____
Back at risk _____ **secure** _____
Fx or dislocation at risk _____ **secure** _____
Neurological:
Mannitol Given _____ **Needed** _____
Informed ED of Treatment _____
Narcotics/Sedatives Given _____
Informed our ED _____
Hyperventilate Yes_____ **No** _____
Immediate problems leading to possible morbidity:
Long term morbidity:

Methods

We prospectively evaluated the initial care provided 100 consecutive multiple injury patients transferred to our facility in 1983. All patients were initially seen by a physician in an emergency department in one of 23 referring hospitals.

After arrival at our hospital, a transfer critique (Figure 1) was completed. The authors reviewed the transferring emergency physician's chart, the critique, and the time required for transfer to determine the appropriateness of the diagnostic or therapeutic interventions. Incorrectly performed procedures, such as nasogastric intubation with massive facial fractures or immediate bladder catheterization with pelvic fractures, were considered noncompliance. Then compliance with accepted standards for trauma care promulgated by the American College of Emergency Physicians and the American College of Surgeons Committee on Trauma was tabulated in four major injury categories.[14] The application of the standards in borderline clinical circumstances was determined by a consensus of the reviewers. The categories were: 1) hypotension with multisystem trauma, 2) major CNS injury, 3) major chest trauma, and 4) orthopedic trauma. All deaths occurring during transfer or in our emergency department were included in the study.

TABLE 1:
HYPOTENSION WITH MULTISYSTEM TRAUMA
(66/100 PATIENTS)

	+	−	NC(%)	Prior NC(%)
Vital signs and repeat B/P	49	17	26	83
Airway secure/O_2	55	11	17	73
IV – adequate size, rate, number, site	50	16	24	91
Gastric decompression	42	24	36	86
Foley catheter or recorded urinary output, urinalysis	39	27	41	77
Hematocrit, ABGs, electrolytes	47	19	29	62
Recorded chest and abdominal exam	41	25	38	72
Withheld narcotics/sedatives	64	4	6	18
Vasopressor given	2	64	3	13

(+) = compliance with standard
(−) = failure to achieve standard
NC = % noncompliance

The reaction generated by the first study focused attention on the problem. The Emergency Medical Care Committee of the state's medical association sent the results of the initial study to all medical staffs in the state. In addition, the American College of Surgeons Committee on trauma publication on early management of multiple trauma was included. Access was provided to a confidential trauma consultation service.

Transferring physicians received written or verbal feedback during the repeat study. A letter was sent to the referring physician regarding those patients transferred by helicopter. Courses on training in Advanced Trauma Life Support, in addition to trauma in-services, were offered.

Results

The patients' ages ranged from 14 to 83, with a median of 36 years. Blunt trauma was sustained by 77 of the patients, penetrating by 23. There were 10 deaths, seven of which included serious CNS injury.

Our emergency department received prior notification regarding the patient in 93 cases, versus 43 in the prior study. The transferring physician sent a com-

TABLE 2:
MAJOR CNS INJURY (60/100 PATIENTS)

	+	−	NC(%)	Prior NC(%)
Airway secure	53	8	13	80
Respiratory support (PO_2 >65, PCO_2 < 45)	47	13	22	93
Circulatory support (systolic BP < 95)	45	15	25	55
Cervical immobilization	51	9	15	59
Neurological exam recorded	39	21	35	81
Cervical films	42	18	30	73
Withheld narcotic/sedatives	56	4	7	11
Gastric decompression	41	19	32	90

(+) = compliance with standards
(−) = failure to achieve standard
NC = % noncompliance

TABLE 3:
MAJOR CHEST TRAUMA (32/100 PATIENTS)

	+	−	NC(%)	Prior NC(%)
Respiratory support – oxygen	28	4	13	33
Endotracheal Tube	25	7	22	77
Thoracostomy tube for hemopneumothorax, flail chest	14	18	56	85

(+) = compliance with standards
(−) = failure to achieve standard
NC = % noncompliance

TABLE 4:
ORTHOPEDIC TRAUMA (37/100 PATIENTS)

	+	−	NC(%)	Prior NC(%)
Splinted appropriately	33	4	11	68
Films – obtained/sent	28	9	24	79
Neurovascular exam recorded	21	16	43	91

(+) = compliance with standards
(−) = failure to achieven standard
NC = % noncompliance

pleted emergency department chart with laboratory data and radiographs in 44/93 cases. Patients were transported by units with advanced life support capability 22 times, basic life support 27 times, and ambulance attendants 12 times. Thirty-nine patients were transferred by helicopter accompanied by an emergency physician from our facility. In the prior study, transport was by advanced life support units 21 times, basic life support units 46 times, and by ambulance attendants 33 times.

There were 66 patients with multisystem trauma who were hypotensive (systolic pressure < 80 mm Hg). Initial treatment of these patients versus the earlier study is summarized in Table 1. There was major improvement in most categories, particularly in errors of omission.

Major central nervous system injury was a component of the trauma in 60 of the patients. The results are summarized in Table 2. Respiratory and circulatory support improved dramatically, with maintenance of oxygenation, ventilation, and perfusion.

There were 32 patients with major chest trauma (Table 3). Most patients received respiratory support including endotracheal intubation. There was still 56% noncompliance with thoracostomy tube placement, versus 85% in the earlier study.

Orthopedic trauma was present in 37 patients (Table 4). Failure to record the initial neurovascular exam was the major deficiency, with 43% noncompliance.

Discussion

Noncompliance with accepted standards of initial trauma care has been reported in many areas of the country.[2-8,13,15]

After evaluating the problem in our area, an attempt was made to reduce repetitive errors.[13] We then reviewed the appropriateness of trauma care in a subsequent series of patients. Noncompliance for patients with multisystem trauma was 28.7%, versus 66.9% in the earlier study. For major CNS trauma, noncompliance was 22.4% (versus 67.7%). For major chest trauma, noncompliance was 30.1% (versus 65%). In patients with orthopedic trauma, compliance decreased to 26% from 79.3%. There are several factors potentially responsible for the decrease in overall noncompliance from 70 to 27%.

Since completion of the initial study, there are 19 more emergency medicine residency graduates practicing in the referring hospitals. In addition to improved pre-hospital care and a more organized regional trauma care system, a recent local development has been the availability of aeromedical transport. In Baxt's series, evacuation from the scene decreased predicted versus observed mortality by 52% in patients treated at the scene.[16] As a component of a rural EMS system, Urdaneta felt 27.4% of his 569 patients transported by helicopter were benefited.[17] In our series, the availability of trained personnel including a physician pro-

vided immediate feedback to the referring physician performing initial hospital stabilization. Errors of omission in those patients were corrected prior to transport to our facility. Written critique of the 36 patients who were accompanied by a physician during transfer was completed based on arrival condition at our emergency department.

Regional teaching programs included trauma in-services and written or verbal feedback on transfers. Physicians have access to courses in Advanced Trauma Life support. The course, which focuses on initial resuscitation training, has been suggested as one means to reduce frequency of errors.[7]

Conclusion

Mulitple factors resulted in improved compliance with standards of initial trauma care. Noncompliance with standards decreased from 70% to 27% in our area.

The commitment and training of the physicians initially stabilizing patients referred to our trauma center has improved significantly. Continued attention should be focused on educational efforts emphasizing initial trauma care.

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Cardiovascular Preventive Behavior and Disease Prevalence in Kentucky

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What proportion of Kentuckians are trying to reduce their risk of heart disease? To answer this question, a telephone survey using random digit dialing was completed. While up to 67% of adults are making some effort to improve their general health, only 42% are making attempts specifically to reduce their risk of heart attack. The most frequent behaviors to reduce risk of heart attack are increased exercise and changing diet. This study also demonstrated the feasibility of low cost telephone surveys for obtaining cardiovascular disease prevalence data.

The large number of newspaper and magazine articles on diet and exercise suggest widespread public interest in reducing the risk of heart disease. However, the degree of converting interest into action is unknown. There are no readily available data describing how many individuals act to prevent personal heart disease. Disease prevention is a high national priority, and is of concern to health leaders in Kentucky as well. This study provides descriptive information about the individual heart disease prevention activities of Kentuckians. The description includes the proportion of Kentuckians undertaking specific preventive health measures to avoid cardiovascular disease, and the types of health measures being taken.

Heart attack, hypertension and stroke prevalence data are traditionally collected by expensive and time-consuming face-to-face interview surveys. It would be advantageous to have a method that obtains data inexpensively and relatively quickly, and that can be repeated periodically. Telephone survey interviews are inexpensive and quick, but their feasibility to collect prevalence data has not been verified substantially. Therefore another objective of this study was to determine the feasibility of telephone survey interviews for estimating heart attack, hypertension and stroke prevalence.

Methods

The survey data were collected as part of the University of Kentucky Survey Research Center's (UK-SRC) Fall Poll, one of the semiannual statewide omnibus telephone surveys conducted by UK-SRC. The survey instrument is available from the authors.

The sample selected was obtained using random digit dialing (RDD), a sampling method that assures that each household in the sample area with a telephone has an equal chance of inclusion in the survey. The advantage of this method over sampling from published telephone directories is that both unlisted and new numbers are included. While a number of RDD methods are currently available, the most efficient is a two-stage cluster procedure and it was employed in this survey.[1] This method entails an initial round of sampling to identify blocks of telephone numbers containing households. Clusters of random telephone numbers are then generated from each of these primary numbers and utilized for the survey.

A random respondent selection procedure was used to give all household members over the age of 18 an equal chance of being interviewed. Callback appointments were scheduled for those designated respondents who were not immediately available. Individuals residing in institutional settings such as hospitals and nursing homes were not interviewed.

A total of 969 interviews were completed. The potential sampling error for the survey is plus or minus 3.2% at the 95% confidence level. This means that the percentage response to each question can be expected to deviate by no more than 3.2% from the results that would have been obtained if every household with a telephone in the state had been called.

Comparisons were made between characteristics of the sample and the 1980 Census enumeration for Ken-

TABLE 1:
PREVALENCE RATES PER 1000 IN KENTUCKY*

	Ever Had a Heart Attack (Prevalence Confidence Interval)	Ever Had a Stroke (Prevalence Confidence Interval)	Confirmed Hypertension (Prevalence Confidence Interval)
STATEWIDE	30.1 (24–37)	13.4 (9.6–18.2)	121.1 (108.0–134.7)
East	27.4 (19.6–37.3)	10.0 (5.6–16.5)	120.5 (103.9–139.8)
West	32.5 (24.1–42.9)	16.3 (10.5–24.3)	121.3 (104.6–140)
Male	41.4 (31.9–53.9)	16.6 (10.6–24.7)	118.0 (101.7–136.9)
Female	19.5 (13.2–27.9)	10.4 (6.6–16.9)	124.0 (107.6–142.7)
AGE			
0–20	0 (0–3.0)	0 (0–3.0)	2.9 (0.6–8.5)
21–40	8.3 (3.6–16.4)	4.2 (1.1–10.8)	90.2 (73.0–111.9)
41–60	46.7 (31.3–67.3)	17.7 (8.8–31.7)	219.0 (184.8–259.3)
over 61	150.1 (111.4–198.1)	68.0 (43.6–101)	365.4 (304.4–438.5)
FAMILY INCOME			
Under $10,000	54.5 (38.0–75.8)	28.1 (16.4–45)	171.6 (140.4–209.4)
$10–$20,000	18.4 (10.3–30.4)	12.3 (5.9–22.6)	89.5 (70.3–113.7)
$20–$30,000	11.7 (5.0–23.1)	7.3 (2.4–17)	102.5 (880.5–130.2)
Over $30,000	24.9 (24.1–42.9)	1.7 (0–9.5)	106.3 (81.9–138.2)

*Confidence intervals are in parenthesis.

tucky. The combinations of ages and sex in the survey sample provided a reasonable match to the 1980 Census estimates. In addition, all regions of the state received representation in the sample proportional to their actual population figures.

Results

Prevalence of heart attack, hypertension and stroke

The total number of surveyed individuals in respondent households was 2989. Prevalence rates were constructed for three cardiovascular conditions: heart attacks, strokes, and confirmed high blood pressure. These rates were computed per 1,000 people using the following formula:

$$\text{prevalence rate per 1,000} = \frac{\text{cases of disease present} \times 1000}{\text{number of persons in the population}}$$

Ninety-five percent confidence intervals for each rate were computed using the Poisson distribution.[2]

The prevalence rate for the population "ever having had a heart attack" in Kentucky was 30.1 (Table 1). When disaggregated by region of the state, Western Kentucky was found to have a slightly higher prevalence of heart attacks. This may be associated with the state's age structure, as a greater portion of elderly people reside in the far western part of Kentucky-the average age of individuals residing in the western half of the state in this survey was 32.8, compared with an average of 31.9 years in Eastern Kentucky. The association between age and heart attack prevalence is clearly demonstrated by the data, as it ranges from 8.3 per 1,000 for individuals aged 21-40 to 150.1 for those over the age of 60. Not surprisingly, heart attacks were also found to be much more prevalent among men.

A curvilinear relationship between reported family income and heart attack prevalence was also observed. Heart attacks are found to occur with more prevalence among those with annual family incomes under $10,000, followed by the group with incomes over $30,000. Individuals with family incomes between $20,000 and $30,000 appear to have the lowest prevalence rates for heart attack of any income group.

Prevalence rates for strokes were generally much lower than those for heart attacks, and demonstrated less extreme variation across various components of the population. For Kentucky as a whole, the prevalence of strokes was 13.4 per 1,000. Again, the western half of the state, as well as men, had somewhat higher prevalence rates than did Eastern Kentucky or females. A strong correlation between age and prevalence rates for stroke was also observed. The relationship between stroke and reported family income was, however, found to be inverse—higher income had fewer strokes, unlike the association of income and heart attack prevalence.

TABLE II:
PREVENTIVE BEHAVIORS IN ADULT KENTUCKIANS

General	
Decreased salt	54%
Increased chicken	37%
Decreased red meat	32%
Decreased whole milk	29%
Decreased eggs	28%
Increased exercise	67%
Quit/tried quit smoking*	71%
Regular blood pressure check	65%
To Reduce Heart Attack	
Any attempt	42%
Of the 42% making any attempt:	
Increase exercise	75%
Changing diet	75%
Regular check-up	67%
Taking Medication	30%
Modifying alcohol	15%
Reduce smoking	57%**

*of the 38% who smoke
**of the 24% who smoked

The prevalence rate of individuals with confirmed hypertension (those told they have high blood pressure by a doctor or other health professional) for the state was 121.1. No difference was found in prevalence rates between Eastern and Western Kentucky. Females were found to have a very slightly higher prevalence rate of high blood pressure than males. A strong positive relationship with age was also found. As with prevalence of heart attacks, a curvilinear association between hypertension prevalence and annual family income was observed. Those individuals with incomes under $10,000 reported the highest prevalence of high blood pressure, with those earning over $30,000 having the second highest prevalence. Unlike the income-specific rates for heart attacks, however, the lowest prevalence of high blood pressure was found among those with incomes ranging from $10,000 to $20,000.

Examining rates that do not have overlapping confidence intervals, there are no real differences in the survey data between the two regions of the state in regards to these cardiovascular conditions. In terms of sex, there is a difference in heart attack prevalence between males and females. Among age and income groups, prevalence rates for all three conditions were found to have differences among subgroups that were of greater size than the confidence intervals of each estimate, indicating the importance of these cardiovascular risk factors.

Disease Prevention Activities

Are the residents of Kentucky trying to reduce their risk of cardiovascular disease? This study examined two aspects: general preventive health measures and measures specifically to prevent heart attack. Data in this section are for adult respondents over 18 (n=969).

General Preventive Health Measures. General preventive health measures can be divided into three areas: dietary, lifestyle, and medical.

Diet. Respondents were asked if in the last year they had changed the amounts eaten of six foods. A majority of respondents reported on change for four of these foods (eggs, red meat, butter and chicken) (Table II). Just over half (54%) had decreased salt intake. Twenty-eight percent of the total sample decreased eggs in their diet, 31% decreased red meat, 32% decreased butter and 29% decreased whole milk, while 37% increased chicken. Detrimental diet changes were also noted 6% increased salt, 11% increased egg consumption, 11% increased butter and 18% increased whole milk consumption.

Lifestyle. Two-thirds of the respondents reported having tried to increase their amount of exercise, and about 80% of these individuals reported increasing their exercise in the last year. Almost two-thirds (62%) of the sample do not now smoke regularly, with 44% never having smoked regularly. Of those who continue to smoke, 71% have tried to quit at some time, and 54% have tried to quit in the past year.

Medical. Almost two-thirds (65%) of the sample reported having their blood pressure checked regularly, and only 22% of these individuals began having it checked in the last year.

Cardiovascular Preventive Health Measures. Respondents were asked if they had done anything to reduce their risk of having a heart attack, and which of seven specific preventive actions they had taken to reduce their risk. A little less than half (42%) are trying to reduce their risk of having a heart attack.

The proportion deliberately attempting to reduce their risk varied by age. Thirty-five percent of those aged 18-24 had specifically done something to decrease their chances of having a heart attack compared with 38% of those 25 to 40 years of age, 47% of respondents 41 to 65 years old, and 42% of those 66 and older. In addition, males were more likely to have taken some specific action (45%), compared to females (40%). Variation was also found among education groups: 36% of those with less than a high school education, 40% of

high school graduates, and 48% of those with more than a high school education had done something to specifically reduce their risk of a heart attack. Of those trying to reduce their risk, the most frequent preventive measures are increasing exercise (75%) and changing diet (75%). A majority (67%) are also getting regular medical checkups, with smaller proportions changing their consumption of alcohol (15%) or taking medication (30%). Of those who are trying to reduce their risk of heart attack and who have ever smoked, 57% have decreased their smoking and 47% have quit smoking.

Discussion

The interview sample compares closely to 1980 Kentucky census data, and the sampling error is about 3% at the 95% confidence level. The results can be expected to be representative of the population of Kentucky.

Thirty-seven percent of adult Kentuckians now smoke, a figure that compares to the 37.9% current smoker status nationwide.[3] Also, Kentucky has a prevalence of hypertension of 22% in age group 41-60, a figure that compares with the 21% national prevalence for age 35-74.[4] Thus prevalence data collected by phone seem comparable to household interview data.

This survey found that 42% of Kentuckians over age 18 had done something to specifically try to reduce their risks of having a heart attack. Because heart disease is the largest killer in Kentucky, as elsewhere, an interesting question is, "Why don't the remaining 58% do anything?"

On the other hand, 71% of existing smokers have tried to quit, half of these in the past year. Also on the positive side, 65% of adult respondents had their blood pressure checked regularly. And 67% have tried to increase the amount of the exercise they get. For these people, the efforts were apparently to improve their overall health, not to specifically reduce their risk of having a heart attack.

While about half the population reported no change in diet, there were some laudable exceptions. Twenty-eight percent decreased their consumption of eggs, and a remarkable 54% decreased their salt consumption. Many other Kentuckians may not understand nutrition. In order to stay healthier, 11% of the population increased their consumption of eggs, 6% increased salt intake, 11% increased butter intake, and 18% consumed more whole milk. Each of these changes is generally considered detrimental to cardiovascular health.

The subgroup that was specifically trying to reduce the risk of heart attack increased exercise and changed their diet (75% each). About half the smokers (57%) decreased their smoking. About 14% tried to decrease or quit alcohol consumption.

These findings describe the prevalence of certain cardiovascular problems in Kentucky. They also shed light on the prevalence of some preventive health behaviors that Kentuckians are taking. Relatively low cost telephone surveys can be seen to provide useful information to the health community.

The finding that 58% of adult Kentuckians are not taking steps to reduce their risk of heart disease should be of concern to health care providers across the state.

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Acupressure: A Hands-on Technique for Treating Headaches

W. GRADY STUMBO, M.D.

Primary care physicians are in a unique position to provide diagnosis and treatment to a large number of patients with complaints of headaches. They can ignore them or evaluate and treat them with medication. Described in this article is a hands-on technique every doctor can learn and use in a surprising number of patients. This method offers relief without the problems that sedatives or narcotics often have.

Headache is one of the most frequent complaints for which a patient will consult a physician. Often it is one of the most ignored and inconsistently treated conditions. One population-based survey in Britain showed that 12% of men and 19% of women had consulted a physician in the previous year for headaches.[1] Testimony before a Congressional committee in the United States indicated that approximately 16 million physician visits a year were made for the complaint of headache.[2]

Success in dealing with patients who have headaches depends upon the physician's skill in applying a preventive, evaluative, and therapeutic program. It is very important for the physician to diagnose the type of headache the patient has and do all necessary tests before attempting medical treatment.

The concept of pain has been well studied. Pathways of stimulus transmission of peripheral pain to higher cortical centers have been outlined and fibers have been classified based on function, size and conduction velocity.[3] The multisynaptic integration of nerve fibers, including the "gate-mechanism" has been proposed and studied. Nocieptors (pain receptors) have specific conduction characteristics, high thresholds of sensitivity, and the ability to maintain prolonged discharge. These characteristics of pain reception at the peripheral level account for several modes of pain input from a single stimulus. This is important in the "gate-mechanism" of pain conduction.[4] This hypothesis describes the high velocity fiber input modulating a gate site in the conduction pathway in order to influence the aftercoming, slower velocity pain message, thus affecting the interpretation of the original pain signal.[5] This may in part explain how or why acupressure works.

Acupuncture was introduced into American medicine in a "circus atmosphere" following wildly exaggerated claims in 1972. However, results are beginning to show a rational use for acupuncture and acupressure, but far below the early exaggerated claims. Headaches are easily placed in one of three classes (see Table one). The technique described in this paper is for Class I headaches.

"Make it stop hurting" often is the plea spoken or implied by many of our patients. Relieving this presenting symptom of pain often leads to frequent and overuse of pain medication. I wish to describe a technique that modifies acupuncture by eliminating the needle and using the thumb-nail to exert pressure on eight nerve points. This technique is well described by Dr. Howard D. Kurland in his book *Quick Headache Relief without Drugs.* After learning this technique I have used it on selected patients in my office since 1978, often with startling results to both patients and staff.

Most of the patients who have allowed me to use acupressure are female in the age group 20 to 40. Most were complaining of tension or muscular contraction type headache. However, I have also used it in post-traumatic headaches and in migraine headaches with good results. The relief of pain occurs within a few minutes—very much like tendonitis injected with xylocaine. The patient feels better and feels better quickly.

The technique has not worked for me in all cases and I still use the traditional medication in some patients with headaches. Acupressure is helpful in many patients and is a technique that I teach them to use for themselves without any difficulty.

TABLE 1

HEADACHE GROUPS

Group One:	Classic migraine, common migraine, vascular headaches, muscle contraction (tension), stress, post traumatic, combined vascular and muscle contraction.
Group Two:	Sinus, vasomotor or congestive rhinitis.
Group Three:	Headaches secondary to hypertension, ocular headaches secondary to refractory error, vascular malformation, temporal arteritis, cervical disease, post seizures, trigeminal neuralgia, tumors.

TABLE 2

PRESSURE POINTS

Pressure Point	Chinese Name	Affected Nerves
Head one	Tai yang	Opthalmic division and maxillary division of trigeminal nerve. Temporal (motor) branches of facial nerve.
Head two	Feng Chih	Occipital nerves
Hand one	Ho Ku	Superficial branch of the radial nerve and deep palmar branches of the ulnar nerve.
Hand two	Lieh Chuch	Lateral antibrachial cutaneous and branches of the radial nerve.

Fig. 1

Fig. 2

Fig. 3

Fig. 4

In treating group one headaches there are four pairs of pressure points to be mastered. (see Table 2)

These eight points are located at places where headache-related nerves are accessible to pressure on the skin surface.

You must locate them and press them in just the right way to get relief. If you are 3-4 millimeters off the correct spot you will not get the best results.

Head one point (see picture 1) is felt by finding a point halfway between the outer corner of the eye and the lateral edge of the eyebrow. Your finger will be on the outer edge of the orbital rim. Now move backwards toward the ear and a small depression will be noted one finger breadth from the starting point. Head one point is a pair, one on the right and one on the left side of the head. To be successful it is important not to go backwards too far to the hollow of the temple.

Head two point (see picture 2) is discovered by first finding the posterior aspect of the mastoid bone, then locating the midpoint of the spine at the base of the skull. Halfway between these two areas on each side of the neck is a groove located between two posterior neck muscles. Firm pressure upwards toward the base of the skull will place pressure on head two point.

Hand one point (see picture 3) is located between the thumb and index finger on the dorsal surface of the hand. It is near the middle of the second metacarpal bone nearer to the index finger than the thumb in the fleshy web space.

Hand two point (see picture 4) is located two fingers width above the radial styloid process in a small depression on the anterior surface of the radius.

Once you have mastered finding the points and can do so with ease you must now learn how to effectively use acupressure. The best rules to give you are the ones Dr. Kurland has defined in chapter 8 of his book.

A. Always press with your thumbnail, not the ball of the thumb, and apply hard painful pressure.
B. Press each point for 15 to 30 seconds. This can be continuous pressure or a rhythmic off-and-on pressure on the point.
C. The head points must be pressed as a pair (both head one points at the same time).
D. Press hand points before head points.
E. Hand one is more effective than hand two and for most hand two will not be needed.
F. Always use head one points first then go to head two.

Complications

In using this technique the complications are few. Initially, patient notes pain from the pressure, occasionally dizziness, 24–48 hours later a few patients have a mild discoloration at the pressure site (this usually because too much pressure was used or used too long) or some tenderness at the site.

From my own experience the use of acupressure has gotten better as I use it. However, there are patients in which it doesn't work despite proper application. But the biggest reasons for failure are technical in nature: (a) missing the target point, (b) pressure not firm enough or (c) pressure not applied long enough.

Acupressure points for sinus type or nasal congestive headaches are not described in this article but are other points well worth learning. Acupressure is inappropriate for group three headaches.

References **1.** Newland CA, Illisls, Robinson PK, et al: A Survey of Headache in an English City. *Res Clin Stud Headaches* 5:1–20, 1978. **2.** White KL: Testimony Before the Senate Committee on Labor and Public Welfare, Subcommittee or Health. US Senate, 94th Congress, Second session, June 17, 1976. **3.** Casey KL: The Neurophysiologic Basis of Pain. Postgrad. *Med* 6:58, 1973. **4.** Shealy CN: the Pain Patient, *Am Fam Physician* 3:131, 1974. **5.** Melzack R, Wall PD: Pain Mechanism: A New Theory Vol 150, pp 971–979, 1965. **6.** Kurland HD, Quick Headache Relief Without Drugs, William Morrow and Company, Inc. 1977.

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The Plaintiff's Whore

In jury trials of liability cases both the defendant's and the plaintiff's lawyers may call on expert witnesses to testify in behalf of their clients. This is particularly true in medical liability cases. The qualifications which entitle a witness to be classified as "expert" are ill defined. Unfortunately, there are professional plaintiff's "expert" witnesses around the country, who, for sizeable fees, make it their business to testify in behalf of plaintiffs in medical malpractice cases. They do it to make money—no other reason. They are willing to bend and twist the truth so as to confuse and deceive the jury. They have no interest in seeing that justice is done. The trial lawyers have a name for them—they call them "plaintiff's whores."

The identity of these professional "expert" witnesses is well known to trial lawyers. This information is sometimes circulated in publications of the American Trial Lawyers Association (an organization of plaintiffs' lawyers). In the latest issue of the Kentucky Bar Journal, there are three advertisements offering the services of panels of expert witnesses for medical malpractice cases. One ad states, "Our compensation is directly related to our success in helping you." Another offers to accept contingency fees.

These pseudo "expert witnesses" are ready for hire and compete with each other for the business from the trial lawyers. They may be very articulate and convincing. Their testimony may be in sharp disagreement with the expert witnesses testifying for the defendant. The poor jury doesn't know whom to believe and often is convinced to side unjustly with the plaintiff. The plaintiff's lawyers have no qualms about hiring these professional "expert" witnesses. They may even hire them on a contingency fee basis, an arrangement that seems unethical to me.

If justice is to be served the expert witnesses of both the plaintiff and the defendant need to be true experts. What a far better thing it would be if the court could appoint the expert witnesses from an impartial panel of authoritative leaders in the particular field involved. They could serve as witnesses for both the defendant and the plaintiff. Their fees would be paid by both sides. This would permit them to be totally impartial. Both lawyers could question them. The jury would have a better chance of arriving at a just decision.

It's a bad problem and is the cause of many injustices. Organized medicine and individual physicians need to give what effort they can to find a solution.

McHenry S. Brewer, M.D.

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MATERNAL MORTALITY

A 39-year-old, married, white, gravida 3, para 2 was first seen by her physician at a gestational age estimated to be 10 to 12 weeks. Because of her age, amniocentesis for amniotic fluid study was discussed but the patient declined such a genetic workup.

Past history is significant in that she had a stillborn infant at age 21 by cesarean section. The details of the stillbirth and indications for the cesarean were not known to the patient. She delivered vaginally in 1982 an 8 lb. 3 oz. child following a rapid labor. She related that there was no time to perform a repeat cesarean section.

The patient's prenatal course was normal with the current pregnancy. She had been seen in the office at approximately 33 weeks gestation. When next seen she presented to the emergency room at 10:30 a.m. complaining of lower abdominal pain and difficulty urinating. A catheterized urine specimen was obtained and shortly following this she had a grand mal seizure and became unconscious. Following this her blood pressure was noted to be 70/0. She was transferred to the intensive care unit and monitored. Blood pressure became unobtainable and she was pulseless. An emergency laparotomy was done but when the abdomen was opened in the intensive care unit the uterus was found to be ruptured with the infant and the placenta in the peritoneal cavity with a large amount of blood. The entire fundus of the uterus had ruptured. Cardiopulmonary resuscitation was carried out for an hour and a half, at which time she was pronounced dead. There was no autopsy. The cause of death was listed as hemorrhage from rupture of a classical uterine incision, not in labor.

The Maternal Mortality Committee classified this as a direct obstetric death with preventable factors in that earlier diagnosis and treatment might have been effective.

The Committee discussed the problem of uterine rupture following uterine surgery and noted uterine ruptures can occur at midgestation or early in the third trimester. The behavior of a classical scar (uterine incision in the body of the uterus rather than the lower uterine segment) in any subsequent pregnancy differs from that of a scar confined to the lower segment. The possibility of rupture of the classical scar is several times greater than that of a lower segment scar. If a classical uterine scar does rupture the accident takes place before labor in about one-third of the cases.[1] Rupture can take place several weeks before term, before cesarean section is ordinarily scheduled. Ruptures of the pregnant uterus have been described at 12 weeks gestation with resulting hemorrhage, hypovolemia and death. Therefore, delivery by subsequent cesarean section cannot uniformly prevent such ruptures. Lower segment scars that are confined to the noncontractile portion of the uterus rarely, if ever, rupture before labor and only infrequently do so during labor. According to Williams Obstetrics,[1] the statistics available are insufficient to permit a precise calculation of the maternal mortality rate that attends rupture of a cesarean section scar. It is probably less than 1% but the perinatal mortality rate can be as high as 50%.

This case is presented since the incidence of cesarean section has risen from 5% in the 1960's to over 20% today in many areas of the United States. With the increase in the number of cesarean births and uterine operations being performed, the obstetrician must be aware of the fact that the uterus can rupture prior to labor or during labor.

Currently, there is an increased interest in vaginal delivery after cesarean so that one might expect an increase in uterine ruptures with serious sequalae. In 1982, The American College of Obstetricians and Gynecologists delineated guidelines for physicians and hospitals wishing to participate in serving patients desiring such a vaginal delivery after cesarean. The following are listed as suggested guidelines for those physicians and hospitals wishing to participate in serving patients desiring vaginal delivery after cesarean:

1. The woman and her physician should discuss fully, early in the pre-natal course, the option of a trial of labor. This would allow for discussion throughout the pregnancy to make certain the patient is aware of the benefits and potential risks.
2. Absolute cephalopelvic disproportion, although rare, remains a contraindication to a trial of labor. However, studies show that subsequent trials of labor are successful in up to 70% of patients in whom the indication for cesarean delivery was "failure to progress in labor."
3. A previous classical uterine incision remains a contraindication to labor.
4. There should be only one fetus and the estimated fetal weight should be less than 4000 g.
5. There should be continuous electronic fetal heart rate and uterine activity monitoring throughout labor, as well as staff and facilities required to respond to acute obstetric emergencies.

References **1.** Williams Obstetrics, 17th edition, Prichard JA, McDonald PC, and Gant NF. Appleton-Century Crofts, Norwalk, Connecticut, 1985. **2.** American College of Obstetricians and Gynecologists Newsletter, Volume 29, Number 2.

John W. Greene, Jr., M.D.
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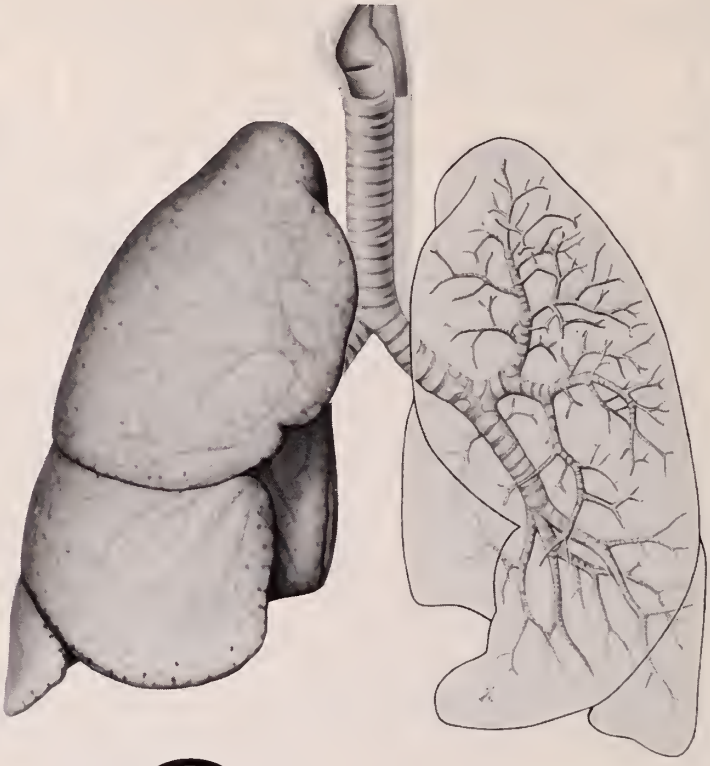

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Brief Summary Consult the package literature for prescribing information

Indications and Usage: Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings: IN PENICILLIN SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics Such colitis may range in severity from mild to life-threatening

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C difficile* Other causes of colitis should be ruled out

Precautions: *General Precautions* — If an allergic reaction to Ceclor* (cefaclor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e g , pressor amines, antihistamines, or corticosteroids

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms Careful observation of the patient is essential If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur This has been observed with Benedict's and Fehling's solutions and also with Clinitest* tablets but not with Tes-Tape* (Glucose Enzymatic Test Strip, USP, Lilly)

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis

Usage in Pregnancy — Pregnancy Category B — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor* (cefaclor, Lilly) There are, however, no adequate and well-controlled studies in pregnant women Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed

Nursing Mothers — Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses Average levels were 0 18, 0 20, 0 21, and 0 16 mcg/ml at two, three, four, and five hours respectively Trace amounts were detected at one hour The effect on nursing infants is not known Caution should be exercised when Ceclor is administered to a nursing woman

Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below

Gastrointestinal symptoms occur in about 2 5 percent of patients and include diarrhea (1 in 70)

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment Nausea and vomiting have been reported rarely

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbiliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor Such reactions have been reported more frequently in children than in adults Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy No serious sequelae have been reported Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic — Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40)

Hematopoietic — Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[061782R]

Note Ceclor* (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever See prescribing information.

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This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: **Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of Dyrenium (triamterene, SK&F CO.) and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function.

Thiazides may add to or potentiate the action of other antihypertensive drugs.

Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: **'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.**

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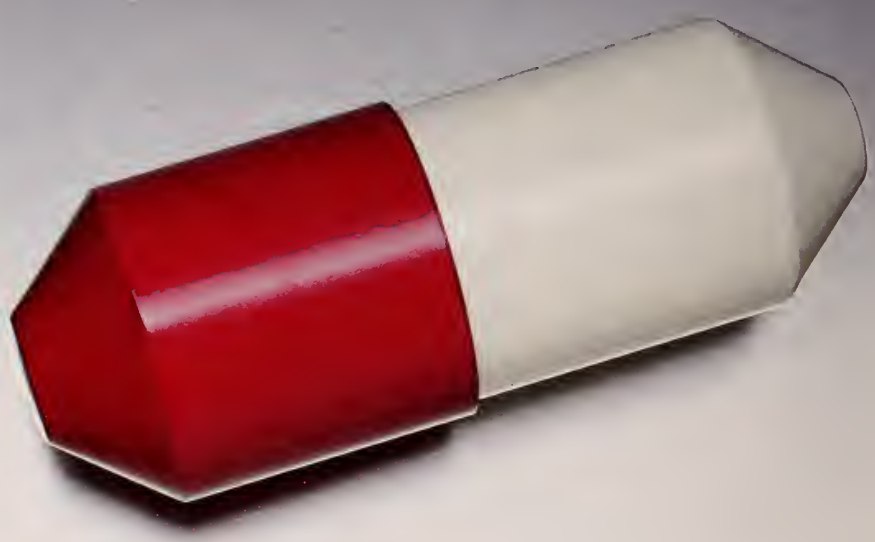

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Medical, legal and ethical papers presented at the Symposium on Human Fertility Regulation, December 14–15, 1984, are edited for this 68 page publication.

Technological advancement in conception, gender selection, prenatal testing and therapy are explained to an audience proposed to be "*family planning professions and others who may be unfamiliar with the subject.*"

More controversial may be maternal substance abuse (drugs and alcohol) with its "*prenatal responsibilities.*" Also cesarean section resulting from court order is discussed as an alternative to preserve the life of the fetus. Continuing in this vain, the section on Late Abortion/ Seriously Ill Neonates presents the issue of fetal viability influencing abortion laws.

Planned Parenthood Federation of America, Inc. published this $8.95 book with obviously some propaganda, which is inevitable. That it presents a point of view with an effort at documentation is to make it a legitimate effort.

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Edited by Lawrence W. Way

Seventh Edition

Although intended to be concise, this magnificent review is quickly outgrowing its covers. Now 1126 pages, 49 chapters, and appendix and written by 89 authors, this tome is an excellent primer in surgery.

Format is said to be consistent throughout, but some chapters and segments are preceded by outlines, others are not. Black and white line drawings dot the landscape, while some parts have many pages with not pictorial respite. Photographs included of x-rays and procedures are fairly sharp and probably useful.

Basically the writing style reflects the eclectic backgrounds of the individual authors but not so disjointed as to be uncomfortable to read.

Revision of the book is undertaken biennially, with modernization of the addended references, and in fact some sources are but four to six months old.

New to this section are excellent chapters on surgical intensive care, anesthesia, surgery of the peritoneal cavity, amputation and the acute abdomen. Developments have impelled revision of medical problems in surgical patients, especially the section on diabetes mellitus.

That wound healing has been currently in vogue for research is reflected in a careful review of the subject by Drs. Hunt *et al.* Cardiac, renal, liver, pancreatic and lung transplantation, newsworthy for the public, have their discussions updated with cyclosporin and other pharmacological immunosuppressives mentioned.

Evolution in antibiotic and anti-inflammatory care demands regular revision, and apropos' various new therapies and recommendations are given in text and table format.

Advances in liver, portal hypertension, biliary tract, pancreas, spleen, hernias and abdominal wall surgery are very helpful.

Cardiopulmonary resuscitation warrants it separate section, well illustrated and didactic, for the beginner and for the relearner.

Major technical innovations, CT scans, MRI (magnetic resonance imaging - have been presented briefly but are well referenced.

Chemotherapy as both an adjunct and independent of surgery of the breast reflects the current discussion in the medical and lay literature about recommended care. Nevertheless this section fairly presents the controversy.

Though it takes a while to even peruse, this paperback at $31.50 is really both easy to read, important to have and affordable current medical education.

Review of Medical Physiology

William F. Ganong

Twelfth Edition, Lange Medical Publications

Since 1963 this monograph has been the product of one author, Dr. Ganong. Singlehandedly he has reviewed medical physiology for legions of medical students and others in graduate education. No wonder over one million copies have been sold, editions in eight other languages are available and every two years one can take a refresher course for less than $23.

Eight sections include an introduction, physiology of nerve and muscle cells, functions of the nervous system endocrinology and metabolism, gastrointestinal function, circulation, respiration and formation and excretion of urine.

Basically this edition is an evolution rather than a revision. That one author has written the entire book results in retaining much from previous edition - as it should be - and updating with small changes and corrections throughout. References to mid 1985 obviously make this edition reflect the state of the art.

Background information in biochemistry, chemistry, physics and anatomy is prerequisite. Discussions are aimed at the student current in these fields and really does not forgive much ignorance. To the clinician some discussion of symptoms and disease presentations as they pertain to physiology and disorders thereof are included, although this is not to advertise a particularly relevant "how to diagnose" or "how to treat" book. In fact this review is germane mostly to the student of the board exam reviewer.

New topics discussed at length include atrial natriuretic factor, the role of N_s and N_i proteins in the regulation of adenylate cyclase, molecular aspects of vision, to name a few are added.

Technical advances in nuclear magnetic resonance and positron emission powered exploration into physiology dilemmas.

An appendix containing general references and statistical evaluation of data is helpful.

Complete indexing, a vestige of prior editions, is maintained. Each section is appended with an updated reference section. Both front and back inside covers are printed with the anatomic weights and normal values respectively.

Illustrations are magnificent, most retained from their predecessors, but many new to this edition. Totaling 600 the black and white line drawings are invaluable. In addition numerous tables and graphs dot the pages making few pages unbroken from text.

Twelve editions speak to the value of this book. Those who study or have studied from it thank Dr. Ganong for his achievement.

Harper's Review of Biochemistry

David W. Martin, Jr., Peter A. Mayes, Victor W. Rodwell, & Daryl K. Granner

Twentieth Edition

Originally published before World War II, Harper's review has been the companion and savior of many students and examinee's. This 20th edition, successor from 1983, follows a recurrent format of introduction, corpus of material, summary and references. Forty seven chapters segment the material adequately, that one can select appropriate material readily. Five authors, four of whom double as editors, are surprisingly conformed in style if not in verse, and their connections with each other is not disjointed.

Substantial organic chemistry is required to be comfortable in this book; in fact physics, basic chemistry and some biology sophistication are assumed.

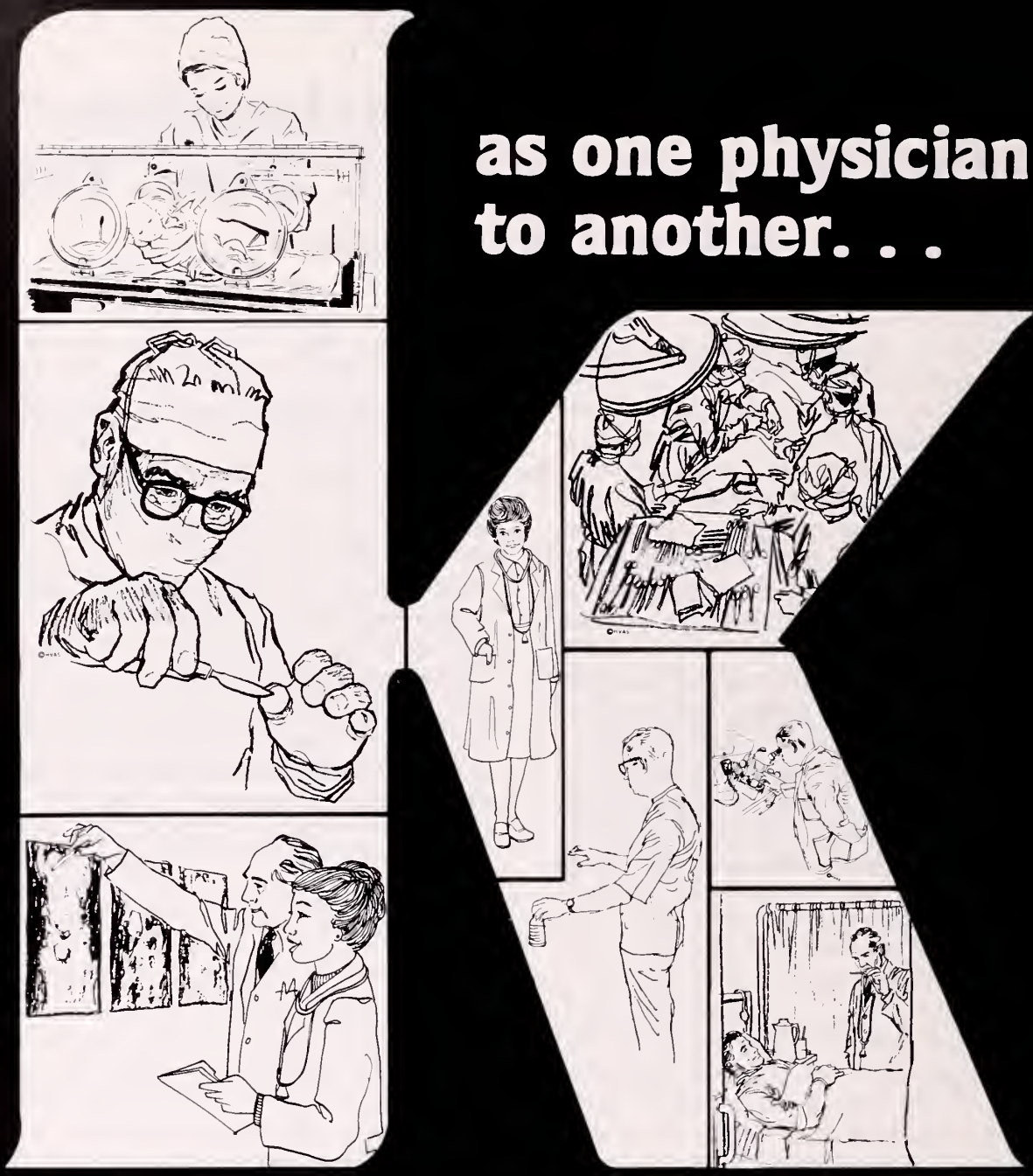
Biochemistry of hormones has been rewritten into eight chapters, numerous illustrations and diagrams. In fact there are over 700 illustrations of various types, diagrams, tables, *etc* which dot the book and avoid the endless text format.

Gene expression and regulation have developments which are now germane to much of this field, apropos of the companion title of molecular biology. Processing RNA to form mature, RNA, the molecular basis of oncogenesis, protein secretion, fatty acid derivatives in the inflammatory response and blood clotting biochemistry have recent developments.

Five countries have their separate English edition and translations in 10 languages document the popularity and usefulness of this text.

Inflation has boosted the price to $24.50, but for the money this book is still a bargain. As a distillate of multivolume textbook and the current basic science literature, this book would be well to have for the student of biochemistry and molecular biology.

Stephen Z. Smith, M.D.
Assistant Scientific Editor



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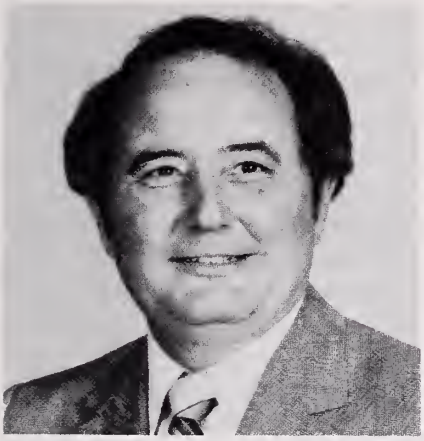
Seminar Held for KMA Key Contacts

On January 8, 1986, the KMA Committee on State Legislative Activities conducted a seminar for KMA key contacts, board members, and specialty society officers. The half-day seminar in Frankfort featured several members of General Assembly leadership along with Senators and Representatives who deal with medical and health legislation on a daily basis.

Retiring Senate President Pro Tempore, Joe Prather (D) Elizabethtown, discussed the importance of active physician participation in the legislative process. Senator Benny Ray Bailey (D) Hindman, Chairman of the Senate Health and Welfare Committee, discussed his proposed Omnibus Health Care Reform Act of 1986. Representative Jim Bruce (D) Hopkinsville, Chairman of the House Banking and Insurance Committee, discussed medical malpractice legislation recently introduced. Mike Maloney (D) Lexington, Chairman of the powerful Senate Appropriations and Revenue Committee, addressed the budgetary process and its effect upon future Medicaid funding. Senator Henry Lackey (D) Henderson, spoke on the future of indigent care.

Wally O. Montgomery, M.D., President of KMA and Carl Cooper, M.D., Chairman of the KMA Legislative Committee, addressed KMA's legislative goals and expectations during the 1986 Kentucky General Assembly. The General Assembly convened on January 7, 1986 and is expected to adjourn on or about April 15.



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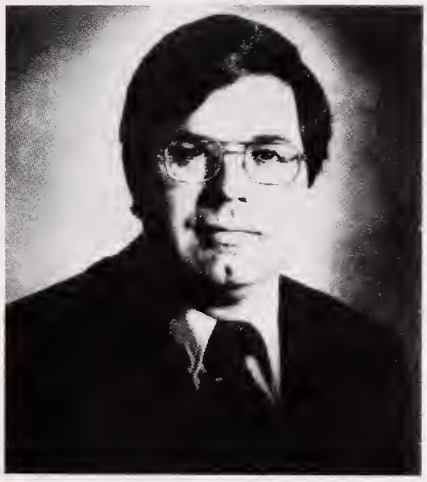
Senate President Pro Tempore



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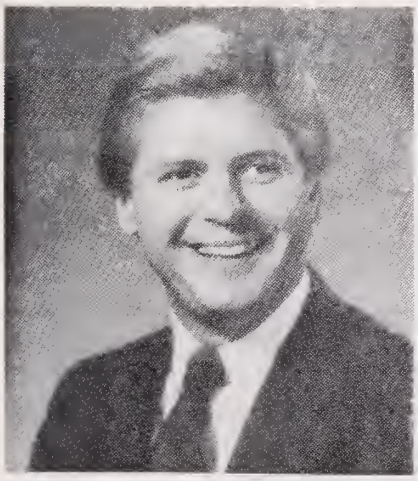

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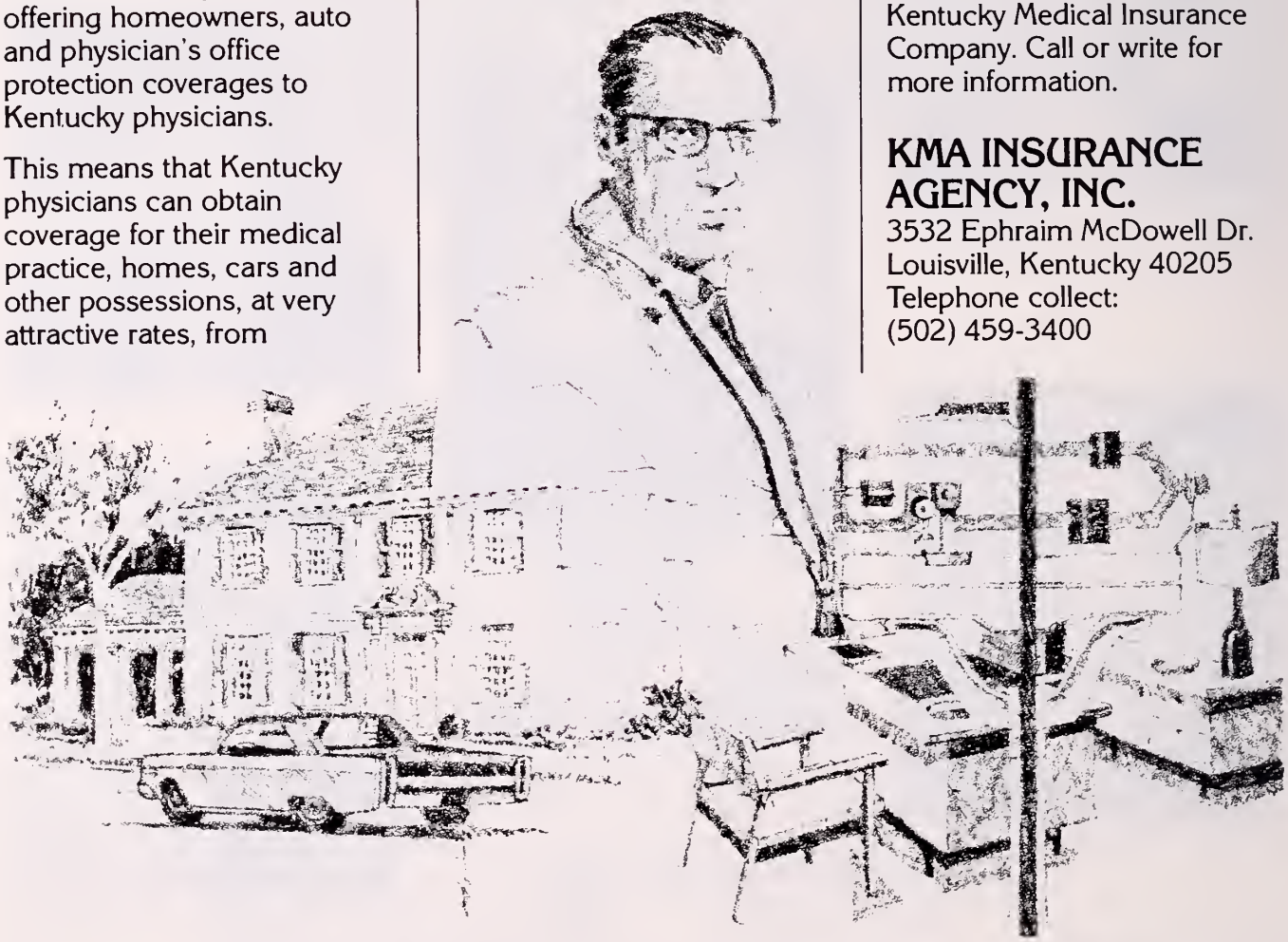

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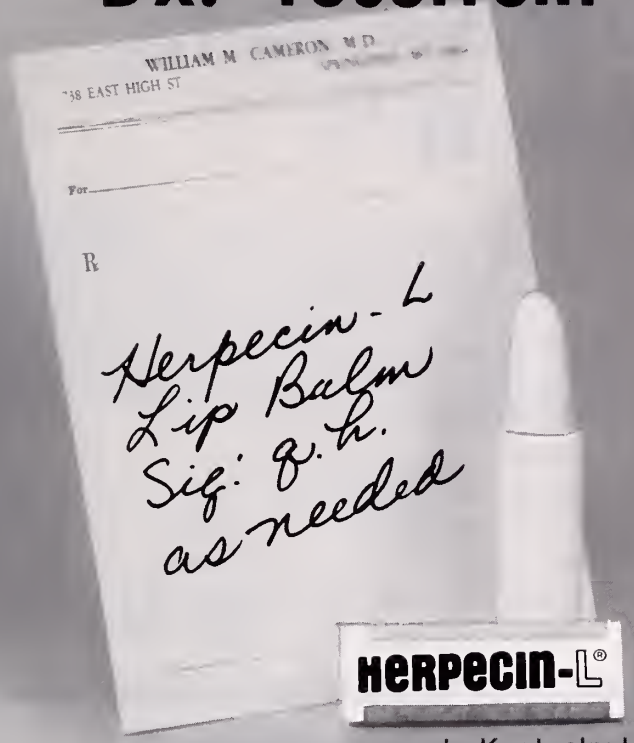

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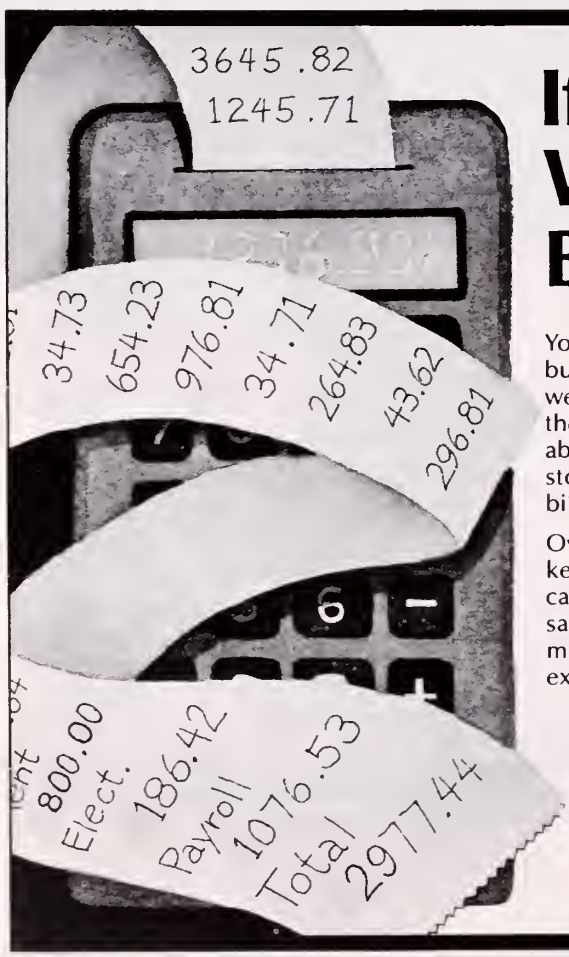

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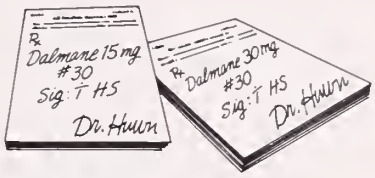

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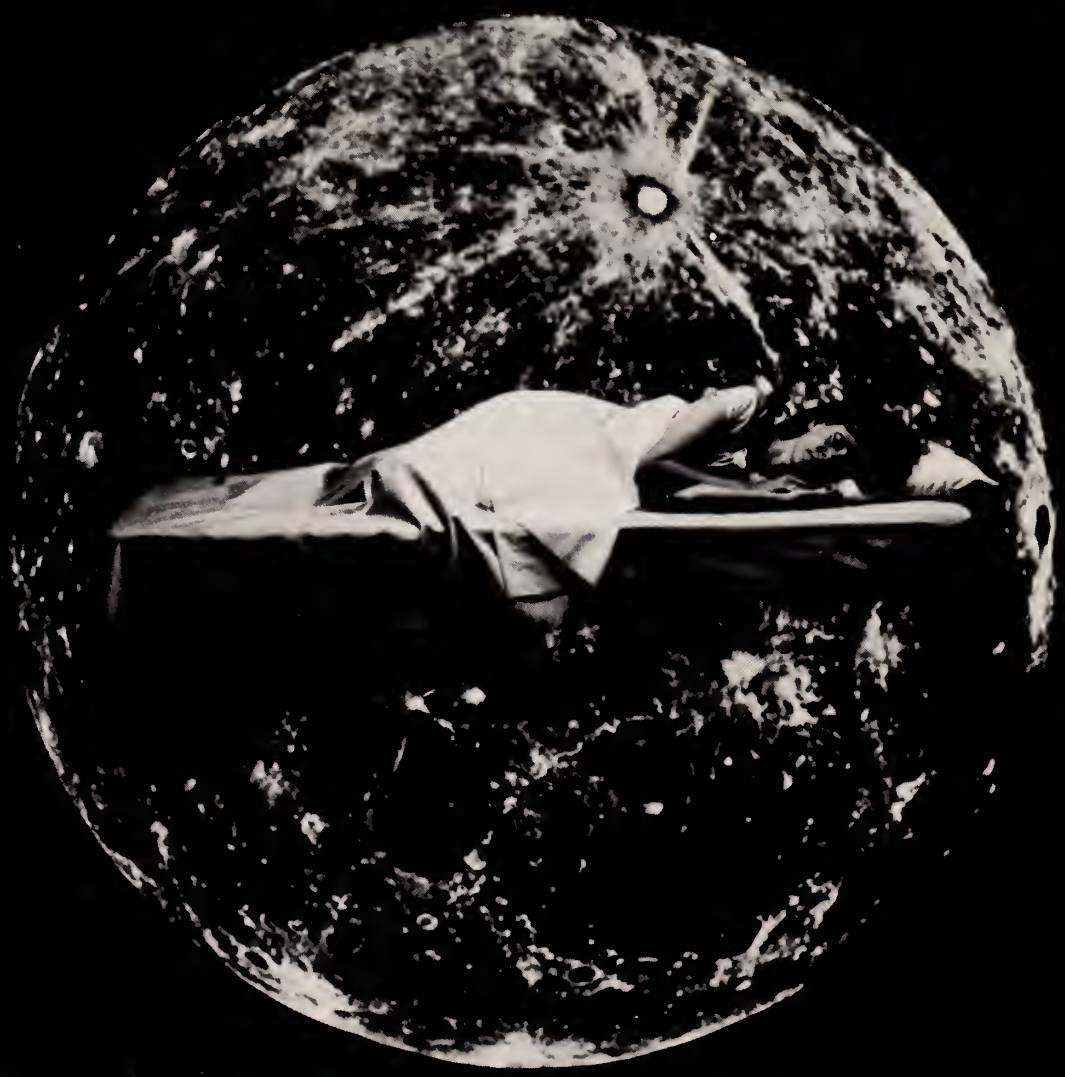

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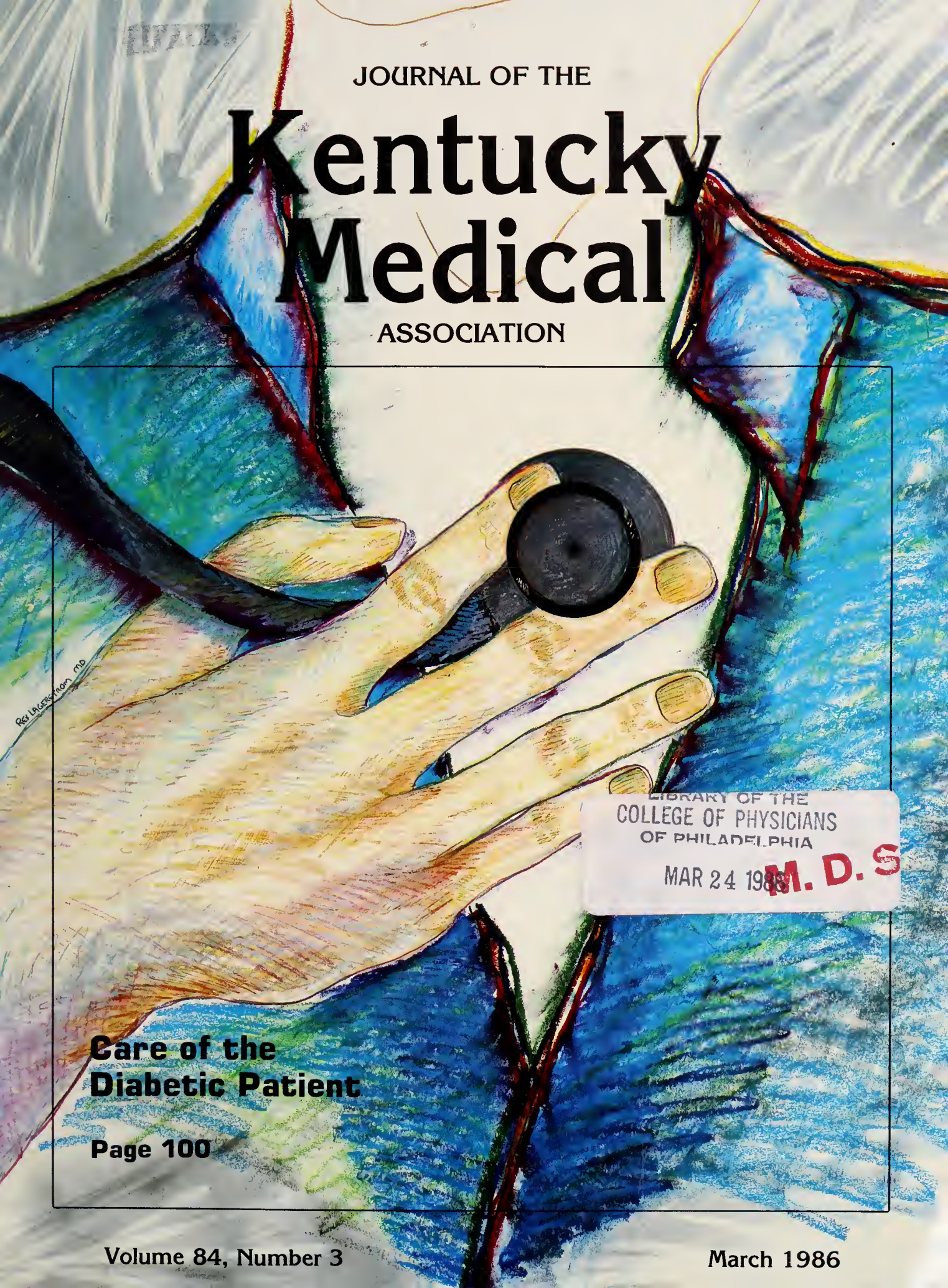

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Care of the Diabetic Patient

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Volume 84, Number 3

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Cover by Rex Lagerstrom, M.D.
This Journal edition is the first in a series of three featuring articles on care of the diabetic patient.

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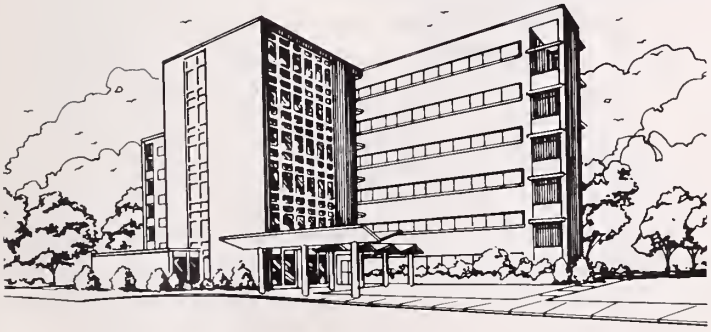

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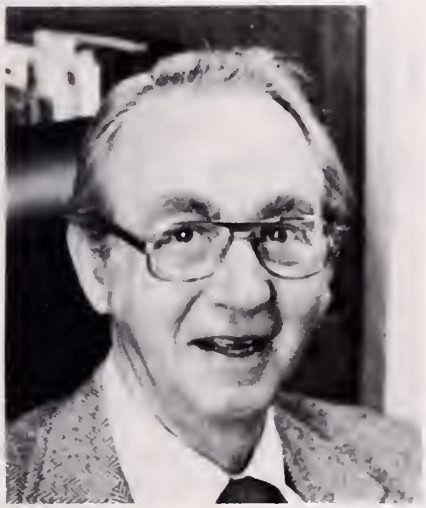

Once again Kentucky Medicine is on the battleground of legislative activity. As before and, it seems, as if always we are facing forces which aim to undermine and erode the foundation of medical practice. By this I mean legislation which would permit the practice of medicine without proper education and qualification.

It is imperative that all of us, in every phase of medicine renew our dedication to the preservation of medical practice as we know it. One of the best ways to do this is to concentrate our efforts in the legislative arena. We need to do this to protect our position as the profession most knowledgable as to what is best for our patients.

We must educate our legislators through close contact and consultation, convincing them of our sincerity and dedication. Much too often we are perceived by our legislators, as well as a large part of the public, as wanting to "protect our own domain" and "feather our own nest," rather than have the best interest of our patients foremost in our hearts. In many ways it is easy to see why we are so perceived.

Too many of us do not take time to talk with our patients and explain our actions and fees. We have become so litigation conscious that it oft times detracts from the patient doctor relationship which is so important to good medical care.

During this legislative session, thus far, there have been over 300 bills introduced and over 50 of these are related to medicine. Of particular importance was Senate Bill 104 dealing with the use of topical medication for the eye by Optometrists, a prime example of medical practice without education and qualification which could be detrimental to the health of the people of the commonwealth. Despite our objections the Bill passed and was signed by the Governor on February 7.

Senate Bill 261 and Senate Bill 262 which deal with malpractice reform have been introduced. We support these bills and hope they will give us some malpractice relief.

There are many other bills which are very important being monitored. You should be expecting a legislative alert at any time.

During the past several legislative sessions we have been very fortunate to be most successful. This has been due to excellent grass root support from our local M.D.'s, Key Men and Auxillary, not to exclude the superb work done by Bill Doll and Don Chasteen, our men in Frankfort.

We cannot always expect this kind of success but we promise that we will continue to do everything we can to promote legislation which will not compromise the quality of care for the citizens of Kentucky.

After this legislative session, I plan to resign as Chairman of the Legislative Committee and allow someone else to have the fun (If I had been wise I would have resigned prior to this Legislature).

I would like to say thanks to all who have given their support in the past and at present.

Carl Cooper, Jr., M.D.
Chairman, KMA Legislative Committee

Overview of the Diabetic Symposium

In October, 1984, the Kentucky Comprehensive Care Diabetes Center was opened at the Humana Hospital University. The speakers each submitted an article of their topic in the symposium to the *Journal of KMA*. The articles include areas of exercise, insulin therapy, monitoring diabetes, hypoglycemia, neuropathies, pregnancy, adolescence. and reviews of eye and foot complications. These nine articles should provide the primary care physician with a good basis and understanding in the rapidly changing diabetes field. Figure 1 illustrates that there have been as many publications per year in the last decade as there were the 25 years prior to 1975. Thus, the knowledge and ability to take care and manage the diabetic patient have vastly changed even within the last decade.

The Kentucky Comprehensive Care Diabetes Center is dedicated to helping diabetics integrate a treatment plan into their current lifestyle. Through education and sophisticated testing procedures the center's diabetes team can help diabetic patients gain control of their disease and lessen their severity of disease.

Patient's are referred to the center by their personal physician. They spend an intensive week and that includes highly sophisticated testing. eye and dental examination, family profile evaluation, self-paced computer interactive programs, discussion groups, muscle toning in the private exercise room, and practical dietary guidance aided by an equipped kitchen and cafeteria facilities conveniently located within the center.

These services are delivered by a team of specially trained diabetes educators, nutritionists, physical therapists, pharmacists, dentists, physiologists, clinical social workers, ophthalmologists and diabetologists. The team of specialists helps the patient to develop an individualized program based on recommendations by the primary care physician. This is a referral center. Its aim is to help the Primary Care Physician educate and initiate contemporary diabetes management for future follow-up and care by the Primary Care Physician.

Diabetes clearly is an "outpatient" disease. However, often the necessary educational processes, evaluations of the metabolic state, and complications which may affect the ability to manage the patient and/or direct the appropriate management of the patient are best achieved during a short stay in the hospital, thus making the outpatient management more efficient and effective for the primary care physician.

Diabetic Neuropathy Can Affect The Physician's Ability To Treat The Diabetic Patient

MICHAEL A. PFEIFER, M.D.

Often when one thinks of diabetic neuropathy we are confronted with the question: Does the hyperglycemia cause diabetic neuropathy? The corollary to this is: Could we prevent diabetic complications or even partially improve nerve-function with improved or tightened glucose control? However, we should realize that the reverse is also true. That is, certain neuropathic complications may affect the method of treatment and the ability to control blood glucose levels in diabetic patients. This article will review three such areas.

Gastric Emptying

Diabetic autonomic neuropathy can cause both gastric acid secretory and motility disorders.[1] Impaired gastric acid secretion has been postulated to explain the reduced frequencies of duodenal ulcers in diabetic patients. Gastric motility abnormalities produce symptoms of anorexia, nausea, vomiting, post prandial fullness, and early satiety. A gastric splash is often evident on physical exam. Gastric emptying abnormalities may also complicate diabetic control. A severe case of gastric atony is illustrated in Figure 1. Although gastric emptying time can be measured by either a standard barium meal or the more sophisticated radionuclide studies (which can distinguish solid from liquid phase gastric emptying), the latter is more sensitive.[2]

The following can be a typical scenario of a patient with gastric emptying abnormalities. The patient takes his/her injection of insulin and then eats his/her meal. The peak action of insulin would occur but the peak absorbtion of the meal contents would be delayed. Thus, a hypoglycemic episode would occur. The counterregulatory response to the hypoglycemia and the meal finally being absorbed would result in a profound hyperglycemic episode. The delay in gastric emptying resulted in both hypoglycemia and hyperglycemia. The term "brittle diabetes" is often used to describe patients with rapidly changing glycemic control.

Unfortunately, as shown in Figure 2, symptoms of impaired gastric emptying are not a reliable index of gastric motility function. Figure 2 illustrates a group of "difficult to control" diabetic patients who were seen in the Kentucky Diabetes Comprehensive Care Center. These individuals were referred to the center because of their "brittle diabetes." Of the patients tested, approximately half had symptoms. However, abnormal gastric emptying was equally high in both groups. Thus, an index of suspicion for delayed gastric emptying should not be the presence of GI symptoms but instead should be suspected in "difficult to control" patients.

Management of delayed gastric emptying includes frequent meals primarily of calorie-rich liquids. Pharmacologic therapy includes use of a dopaminergic antagonist (metoclopramide), use of a parasympathetic agonist (bethanecol), or both.[3] Therapy is initially started parentally. High fiber diets may delay gastric emptying and should be avoided in the patients with gastric motility disorders.

Adrenal Glands

Short term glucose regulation is primarily mediated by the action of two hormones, glucagon and epinephrine.[4] Growth hormone and cortisol are more important for chronic glucose regulation. In the non-diabetic, hypoglycemia is a potent stimulus for glucagon secretion. This hypoglycemic response is progressively blunted in type I diabetes as a function of duration of disease, becoming almost totally undetectable after 14 years of diabetes. However, it is significantly blunted after only three to five years of disease. The blunted glucagon response has been attributed to autonomic neuropathy, hyperinsulinemia, and an intrinsic alpha cell defect.

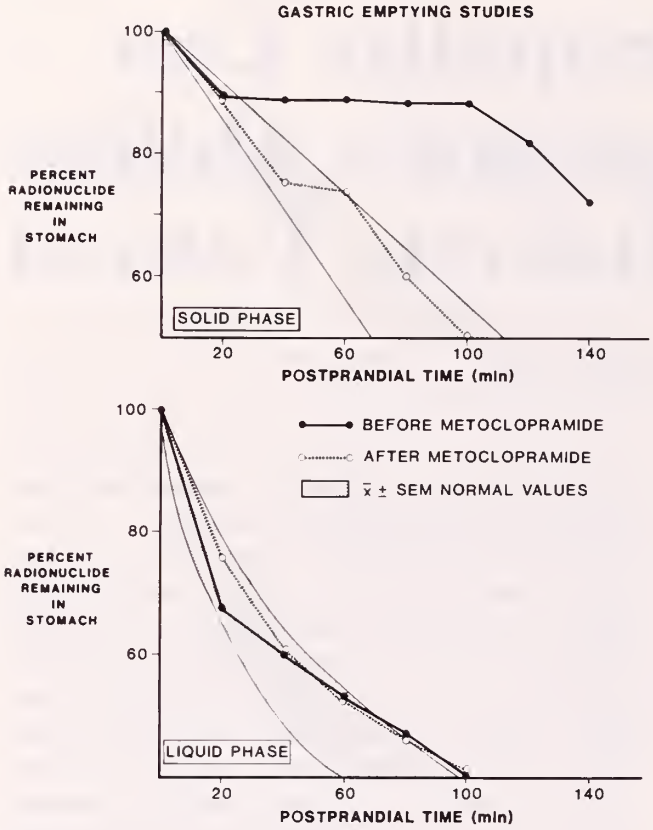

Fig. 1

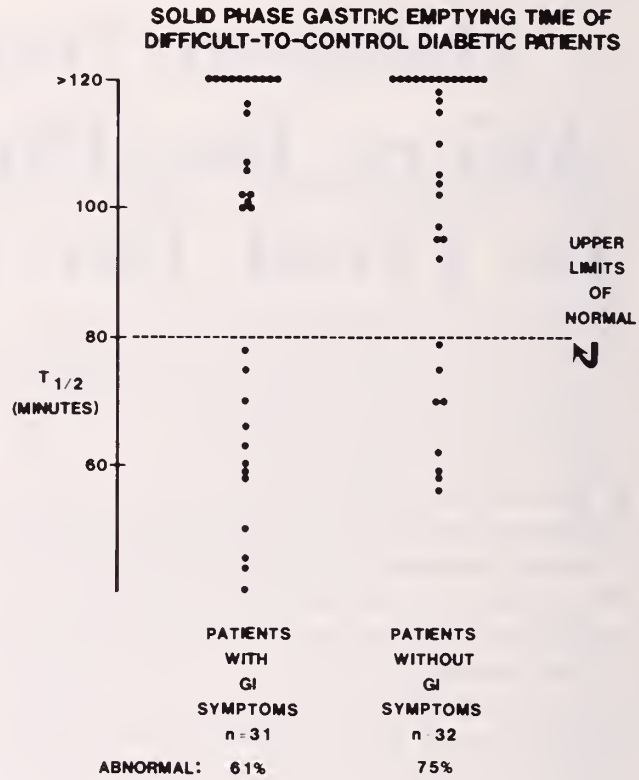

Fig. 2

Regardless of the etiology the blunted glucagon secretory response to hypoglycemia increases reliance upon the adrenergic counter regulation epinephrine. This response can also be limited in diabetics (often after 12 years duration of type I diabetes).

Blunted epinephrine response to hypoglycemia is ascribed to autonomic neuropathy of adrenal medulla though it may occur occasionally as an isolated finding. Combined glucagon and adrenal medullary counterregulatory impairment may cause hypoglycemic unawareness. This is the syndrome marked by the absence of usual adrenergic warning signs of impending neuroglycopenia. This syndrome may be complicated by the coexisting general sympathetic autonomic neuropathy which decreases the diaphoresis which usually signal hypoglycemia.

The typical scenario of a patient with hypoglycemic unawareness includes periodic amnesia, irritability, lethargy, drowsiness, and marked personality changes. The patient may become hypoglycemic and remain so for a period of an hour or longer; occasionally severe seizures result. Family members will complain that the patient seems to be more irritable and loses touch with them at times. Mental functions will be blunted during periods of hypoglycemia. Many of these signs and symptoms are subtle. A hypoglycemia is often followed by a hyperglycemic episode (when the insulin wears off and the cortisol and growth hormones finally take action). Thus these patients will fluctuate between hypoglycemia and hyperglycemia.

Management of hypoglycemic awareness is difficult. Hypoglycemic unawareness may significantly increase the risk of intensive insulin therapy and thus near normal glucose control should not be a therapeutic goal. In these patients, often the goal is to only maintain the blood sugar between 150 and 200 mg/dl. The syndrome can be diagnosed by controlled insulin induced hypoglycemia and measurements of reduced glucagon and epinephrine secretion.[5] Education of the family members as to these subtle signs and symptoms of hypoglycemia should be initiated, as well as education in the family members in methods of counteracting the hypoglycemia. Frequent self-glucose monitoring is often required in these patients.

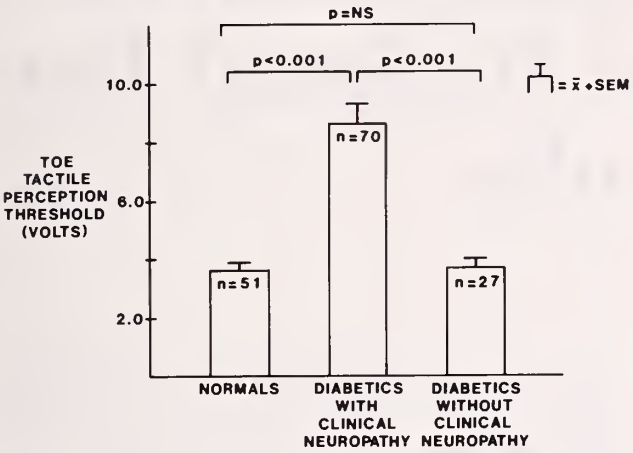

Fig. 3

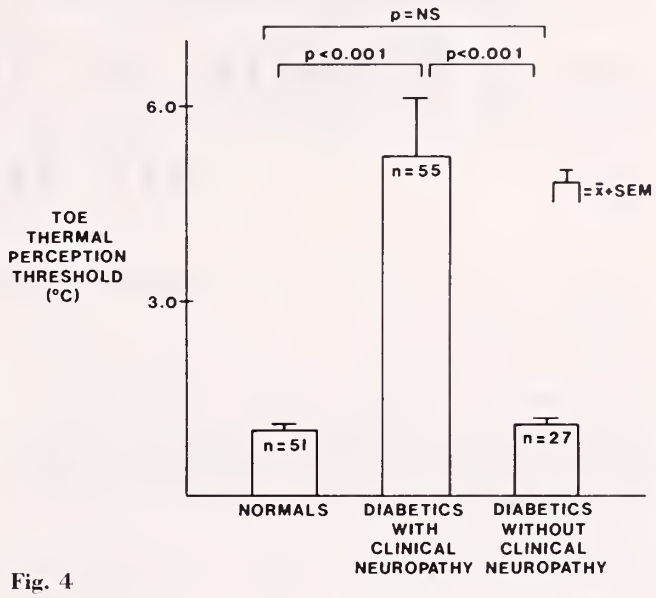

Fig. 4

Insensitive Diabetic Foot

Exercise (see Dr. Cyrus' article of the symposium) is part of the therapeutic management of diabetics. An insensitive diabetic foot may be a complication of the diabetic neuropathy seen in patients (see Dr. Broadstone's article). Unfortunately, methods for measuring the insensitive diabetic foot are not generally available. Clincal signs and symptoms are often nebulous and variable in reproducibility. However, new techniques of thermal and tactile toe perceptions are now available (Figures 3 & 4.) In this group of patients toe tactile and thermal perception threshholds have been determined. Diabetics with documented clinical diabetic neuropathy showed clearly elevated toe and thermal perception abnormalities. However, diabetics without clinical neuropathy were not significantly different from the normal individual. This is an important consideration because patients may have abnormalities without signs or symptoms. Exercise programs in patients with insensitive diabetic feet should not include jogging or walking, but should include less traumatic lower extremity exercise such as swimming or rowing. Furthermore, patients should be encouraged to purchase the more expensive individually shaped and fitted shoes, if they have abnormal thermal or tactile perception thresholds. Proper foot care and management is of the utmost importance especially when we consider that the neuropathic foot is a prelude to the neuropathic ulcer and amputation. Preventive medicine is the goal. Thus, by using these techniques of thermal and tactile perception threshhold determinations sub-clincal and asymptomatic abnormalities of the feet can be detected and appropriate exercise and footwear management can be recommended.

Summary

Three areas have been described in which neuropathy affects the ability to treat diabetic patients. Once recognized, gastric emptying can be modified and rendered normal with appropriate medicinal therapy. Adrenal autonomic neuropathy may require intensive patient and family education as well as self-glucose monitoring. The insensitive diabetic foot would modify the exercise program and footwear. These technologies are available and are being used routinely at the Kentucky Comprehensive Care Diabetes Center.

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Physiological Considerations as a Guide to the Rational Use of Insulin

ROBIN EWART, M.D., PH.D.

In this paper, the physiological pattern of variation in insulin concentration in the plasma of normal, non-diabetic subjects is employed to develop strategies by which good or excellent control of plasma glucose concentration may be achieved in Type I, insulin-dependent diabetic patients by use of multiple daily insulin injections. Consideration is given to the possibility that such regimens may favourably modify the development of chronic diabetic complications. Practical points relating to patient acceptance and the choice of specific insulin preparations are briefly discussed.

Insulin was introduced into the treatment of diabetes in 1922, less than one year after its discovery by Banting and Best. The insulin preparation available at that time was the unmodified peptide hormone, now referred to as regular insulin. With a short duration of action following subcutaneous injection, this form of insulin was felt to be inconvenient, requiring as it did several daily injections if euglycemia was to be achieved. The insulin manufacturing companies responded to the implied demand by devising new formulations of the hormone modified so as to provide timed delivery of insulin from the subcutaneous injection site. A number of these different intermediate and long-acting forms of insulin, together with the parent hormone, are listed in Table 1 which shows the times of their peak actions and the duration of their effects. It should be stressed that the data provided are approximate only, since variation in pharmacokinetic behaviour is noted between individuals and in the same individual from day to day depending upon the site and the precise technique of injection. One frequently forgotten fact deserves specific mention in considering the insulin preparations shown in the table. Lente insulin is a preselected mixture of semilente and ultralente insulins in a 3:7 ratio. The commonly held belief that this insulin behaves identically to NPH is thus clearly incorrect since Lente, with its significant content of long acting ultralente insulin, is considerably longer acting than NPH.

The medical profession was quick to adopt these newer, more convenient insulins and the popularity of single daily injection insulin regimes was rapidly established. This trend coincided with and to some extent was made possible by the growth of a belief that the long term complications of diabetes, retinopathy, nephropathy and neuropathy, were in some way genetically determined concomitants of the diabetic diathesis and were not attributable to the metabolic derangements, including hyperglycemia, which are seen in the diabetic patient.

It has been said that if you scratch the surface of an endocrinologist you will discover a physiologist trying to get out. In the management of Addison's disease, for example, the endocrinologist will not only choose a daily dose of cortisol as close as possible to his best estimate of the normal daily cortisol secretion rate but will split the dose in an attempt to mimic the physiological diurnal variation of the plasma level of the hormone. Yet, for many years, this same endocrinologist has, apparently, been content to manage his insulin-dependent diabetic patients with a single dose of an intermediate or long acting insulin. The consequences of such an approach have been poor or bad plasma glucose control and, more importantly, the need to impose stringent regulations of dietary and exercise patterns upon the unfortunate diabetic population.

The development of a rapid, accurate and precise radioimmunoassay for insulin in biological fluids by Yalow and Berson in 1960[1] provided a new insight into the physiology of insulin secretion. Analysis of the diurnal variation of plasma insulin levels in normal weight, non-diabetic subjects (Figure 1, panel a) reveals that there is a relatively constant, low concentration of the hormone present in plasma during periods of fasting and in the interprandial intervals. This baseline, co-

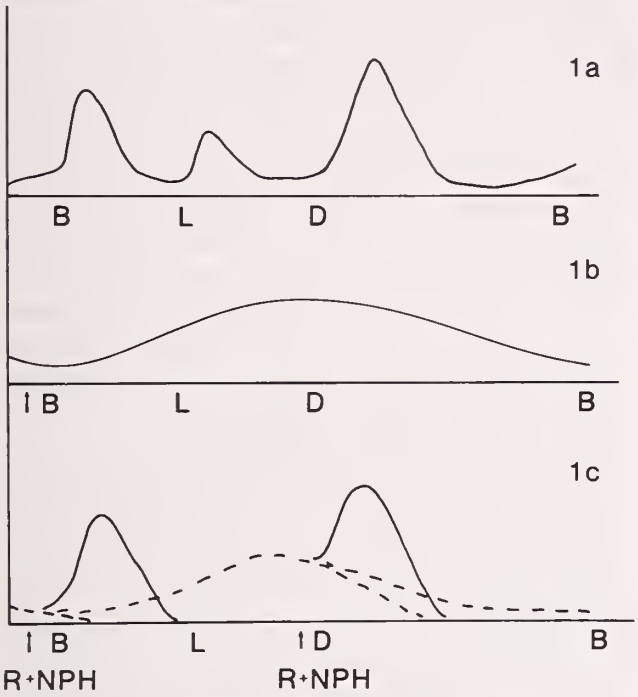

Fig. 1: Patterns of plasma insulin concentration.
The horizontal axis represents an approximately 24-hour time period with mealtimes indicated by B (breakfast), L (lunch) and D (dinner). The vertical axis represents plasma insulin concentration in arbitrary units. Panel 1a shows the variation of plasma insulin in a normal, non-diabetic subject who, on the day illustrated, ate a moderate breakfast, small lunch and large evening meal. Panel 1b shows insulin concentrations achieved in a Type I diabetic patient following the injection of a single daily dose of Lente insulin before breakfast (at arrow). Panel 1c shows the insulin concentrations resulting from the twice daily injection of a mixture of regular (———) and NPH (····) insulins before breakfast and before dinner.

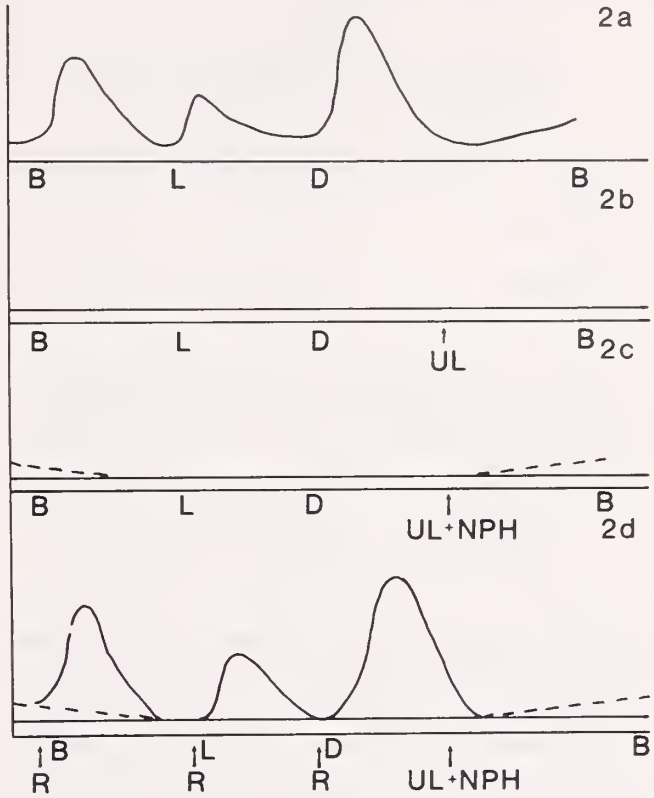

Fig. 2: Patterns of plasma insulin concentration
The general format is the same as for Figure 1. Panel 2a again shows the normal pattern of plasma insulin in the normal, non-diabetic subject. Panel 2b shows the low, constant level of plasma insulin resulting from a single daily injection of ultralente insulin injected at bedtime (———). Panel 2c shows the effect of adding a small dose of NPH insulin (····) to this bedtime dose. Panel 2d shows the pattern of insulin concentration in plasma when three injections of regular insulin (———), each taken shortly before meals, are superimposed on the baseline level of insulin resulting from the mixture of ultralente and NPH. The similarity to the normal, physiological situation should be noted.

stant provision of insulin is marked by a minor, but consistent, increase during the nighttime hours. The precise cause of this apparently paradoxical rise in plasma insulin overnight is unknown but may represent a pancreatic response to the rise in plasma cortisol levels which normally occurs at the same time and presumably tends to raise plasma glucose concentration if unopposed by a compensatory increase in the rate of insulin secretion. Superimposed upon this overall daily baseline are intermittent peaks of insulin following meals, each of approximately three hours duration and of a height dependent upon the size and composition of the meal consumed.

The plasma insulin concentration in an insulin dependent diabetic taking one daily injection of Lente insulin before breakfast is shown in Figure 1, panel b. It is clear that this regime in no way reproduces the normal situation. For example, the patient is overinsulinized in midafternoon and overnight and underinsulinized following breakfast and the evening meal. Poor blood sugar control is clearly to be expected by use of such a regime.

What strategies can be developed to attain a closer simulation of normality employing the insulin preparations at our disposal? An approach which found favour with diabetologists during the 1970s involves the twice daily injection of variable mixtures of regular and NPH insulins. The four component pattern of insulin delivery into the blood stream from this simple regime is shown in Figure 1, panel c. A urine or blood test before lunch reflects the adequacy of the morning dose of regular, before dinner of the morning dose of NPH.

TABLE 1.
COMMONLY USED INSULIN PREPARATIONS

Insulin Preparation	Action following S/C Injection (hours)	
	Peak	Duration
Regular	3	6
NPH	8	16
Semilente	6	14
Lente	8	36
Ultralente	18	36

at bedtime of the afternoon dose of regular and before breakfast of the afternoon dose of NPH, allowing dosage adjustment by the patient. A reasonable initial regime is represented by

5 units regular + 15 units NPH before breakfast and 5 units regular + 5 units NPH before dinner.

Animal studies have demonstrated a suggestive relationship between the degree of glycemic control and the rate of development and/or progression of diabetic complications.[2,3] Human data, however, remain fragmentary and largely unconvincing[4,5] although the American Diabetes Association supports the hypothesis that good control is desirable. In an effort to resolve this important question, a major, long-term, multicenter trial to determine the possible relationship between glycemic control and the development of diabetic complications is now planned by the National Institutes of Health. Pending the outcome of such a study, however, most diabetologists now believe that achievement of good diabetic control is a worthwhile goal.

The quality of plasma glucose control attained by the twice daily, mixed insulin regime illustrated in Fig. 1 is limited. Thus, in the author's personal series, a change from once daily Lente insulin to a regime of regular plus NPH twice daily was associated, in 80 patients, with a fall in HbA_{1c} from 19.2% to 10.8%.[6] While these data indicate a significant improvement in the level of glycemic control, very few patients in the study group achieved a level of HbA_{1c} within the normal range ($HbA_{1c} < 8.5\%$). This and similar observations by other investigators led many diabetologists including the author to develop more complex regimes of insulin delivery. The rationale for the author's favored regime is illustrated schematically in Fig. 2. In Fig. 2, panel a, the physiological pattern of plasma insulin is illustrated. In panel b, the low level of plasma insulin seen in response to a single injection of ultralente insulin is shown. Because of the very long duration of action of this insulin preparation, the precise timing of the injection is not important. The author, however, prefers to give this single daily injection of ultralente insulin at bedtime so that a low dose of NPH insulin can be added. Taken at bedtime, the NPH which peaks about eight hours after injection, reproduces the gently rising level of plasma insulin which occurs overnight in normal subjects and to which reference was made earlier in this article (Fig. 2, panel c). Typically, this desired baseline insulinization can be provided by a mixture of 10 units of ultralente and 5 units of NPH given as a single injection at bedtime, the precise dose of NPH being adjusted so as to control the before breakfast plasma glucose at a level of approximately 100 mg/dl while avoiding nocturnal hypoglycemia.

The patient is then instructed to administer an injection of regular insulin half an hour before each meal (Fig. 2, panel d). Initially, dosage can be chosen quite empirically using 5 units for a small meal, 10 units for an average sized meal and 15 units for a large meal. Fine adjustments can then be made by the patient based on the results of home blood glucose monitoring or the occurrence of hypoglycemia. Patients often become very skilled in dosage selection and the flexibility of this regime leads to excellent patient acceptance. Thus, it is the author's custom to allow complete dietary freedom to patients on this regime. Patients can delay or even miss meals without risk of hypoglycemia since the timing and size of each dose of regular insulin is determined by the time and size of each meal. Conversely, the patient can indulge occasionally in what would otherwise be regarded as dietary indiscretion since there is some dosage of regular insulin which will provide good plasma glucose control following even the largest and most carbohydrate-rich meal. Despite allowing such dietary latitude, the quality of plasma glucose control attainable employing this qid regime can be excellent in well-instructed and motivated patients. Thus, in a series of 35 patients whose management was changed by the author from regular plus NPH insulins twice daily to the four daily injection regime illustrated in Fig. 2d, the mean HbA_{1c} fell from 9.9% to 7.4%, this latter value being within the normal range and reflecting further improvement in diabetic control.[6]

The quality of plasma glucose control attainable by use of an intensive insulin regime is beyond question. Although initial patient reaction is often negative, a variety of minor practical points serve to increase patient acceptance. These include the multiple use of 'disposable' insulin syringes and the abandonment of use of alcohol wipes for skin preparation. Many of the author's patients load a low-dose disposable syringe with

regular insulin each morning and carry the syringe with them for use before each meal during the day, often injecting through their clothing. No apparent problem with skin infection has been seen arising from such practices, and by permitting them, patient acceptance of the qid insulin regime is excellent. Indeed, patients who have experienced the flexibility of diet and exercise which is possible using the qid regime usually refuse to return to a twice daily injection schedule which requires a much more regimented lifestyle.

Having proposed a technique by which near-normalization of plasma glucose may be achieved, a word of caution is made necessary by an important finding reported in 1984 in the *New England Journal of Medicine* by a collaborative study group funded by the Kroc Foundation.[7] In this important cooperative study, it was shown that institution of very good plasma glucose control was apparently associated with an improvement in diabetic renal involvement as evidenced by reduction in microalbuminuria but that pre-existing retinal disease worsened. The precise significance of the latter finding is uncertain but suggests that caution should be exercised in the institution of intensive insulin therapy, at least in patients with existing evidence of retinal disease. In the case of Type I diabetic patients early after diagnosis and without evidence of microvascular disease, however, the author strongly advocates an attempt to achieve near normal plasma glucose concentrations by use of an intensive insulin regime of the type described. It should be noted that a similar quality of diabetic control can be achieved by use of continuous subcutaneous infusion of regular insulin using an insulin pump. In an elegant study conducted at the Mayo Clinic, however, the investigators showed no advantage of pump therapy over an intensive multiple injection regime, at least in the short term.[8] The experience of the present author suggests that most patients seem to prefer multiple injections to use of pump insulin delivery.

In closing, it is appropriate briefly to consider the question of the species origin of available insulin preparations. From an evolutionary standpoint, insulin is a highly conserved protein molecule, that is to say that the insulins of various mammalian species exhibit only minor heterogeneity. Thus, out of 51 amino acids comprising the insulin molecule, pork and beef insulins differ from human insulin in only one and three amino acid residues respectively. Even these minor differences, however, are sufficient to make beef and pork insulins antigenic and occasional patients will exhibit manifestations of antibody-induced insulin resistance, mediated by IgG, or insulin allergy, mediated by IgE, following their prolonged or, more frequently, their intermittent use. In such patients, the use of human insulin, prepared either semisynthetically by chemical modification of pork insulin or by the recombinant DNA technique in E. coli, may be useful in minimizing the clinical consequences of the insulin-antibody interaction. Other situations in which the use of human insulin is indicated include any patient in whom intermittency of insulin therapy is likely, such as those with gestational diabetes or the Type II diabetic patient who requires insulin only during periods of stress or surgery. In other situations, the highly purified preparations of pork or beef insulins, singly or in combination, which are presently available are entirely satisfactory for clinical use and retain a significant cost advantage.

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New Methods for Monitoring Insulin-Dependent Diabetes: Clinical Application and Results

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The introduction of insulin into clinical practice more than 60 years ago represented a quantum leap in our ability to provide care for insulin dependent diabetes. Prior to the availability of insulin, unfortunate patients with the form of diabetes currently called insulin dependent or Type I diabetes either succumbed with the first episode of diabetic ketoacidosis or lived for a brief time in "metabolic" wards eating high roughage, low carbohydrate diets and waiting for the next episode of ketoacidosis. In the years since insulin was first administered in its impure state as an intramuscular injection of 5-15 cc of "McLeod's serum" (sic),[1] numerous advances including its progressive purification, the development of modified insulins with different absorption profiles, and most recently the production of synthetic human insulin of bacterial origin have taken place.[2,3] Despite these impressive advances, our level of therapy remains at the stage of treating complications and hormone replacement (Table 1). The micro and macrovascular complications that were, in a sense, unmasked with the introduction of insulin therapy and the resultant longevity of type I diabetic patients, remain a devastating problem. Moreover, we have only just started to consider the possibility of 'curing' diabetes with gene transfer technology or preventing diabetes with immunosuppression in its earliest phase.[4]

Although our therapeutic endeavors remain at the level of hormone replacement, the last five years have witnessed enormous advances in our ability to monitor both acute and chronic metabolic control and to deliver insulin more physiologically. These advances in monitoring and insulin delivery have evolved from clinical research into methodologies that are increasingly used by diabetic patients. The purpose of this paper is to review some of those advances that have proved most beneficial in the clinical care of type I diabetes.

Monitoring

Self-monitoring-urine

One of the obvious shortcomings of diabetic management in the past was inadequacy of self-monitoring with urine measurements. Despite improvements in the technology of urine glucose measurements over the years, urine monitoring remained problematic for several reasons (Table 2). Since glucose only appears in urine after the renal threshold is exceeded, the semi-quantitative urine glucose test is 'blind' to blood glucose levels below the renal threshold (usually 160-220 mg/dl). Unfortunately, the renal glucose threshold is variable from patient to patient and can also change substantially over time in an individual patient.[5,6] Urine testing is too insensitive and variable to be useful for subjects attempting to control their blood glucose in or close to the normal range. It is of especially limited value in warning patients of incipient hypoglycemia. In addition to the insensitivity of the urine test at variable, low plasma glucose concentrations, there are two major problems with your testing. Because the urine in the bladder represents the plasma filtered over some poorly defined period of time prior to collection, there is always some discrepancy between the urine glucose and plasma glucose. Even when patients attempt to double-void, a difficult chore for most, this time discrepancy persists.[7] The time discrepancy is especially prominent in patients with enlarged bladders or incomplete bladder emptying secondary to autonomic uropathy or prostatism. The other major problem with urine tests is that they are semi-quantitative at best and even in the best circumstances, significant errors in interpreting the color changes are made frequently.[8] The disparity between simultaneous urine and plasma glucose determinations shown in a population of type I diabetic subjects by Tattersall and Gale[9] or in a single diabetic

TABLE 1

STAGES OF DIABETES THERAPY

I. Cure
  A. Immunotherapy - Type I
  B. Diet - Type II
II. Hormone Replacement
  A. Conventional injection therapy
  B. Pumps
    internal
    external
  C. Hybrid delivery services
  D. Pancreatic Transplantation
  E. Gene transfer
III. Managing Complications

TABLE 2

DISADVANTAGES OF SEMIQUANTITATIVE URINE GLUCOSE TESTING

1. *Insensitive* - Cannot measure below the renal threshold which is variable from patient to patient. (30% to 40% of type I diabetics will spill at BG concentration of <160 mg/dl and 20% to 30% only if BG is >220 mg/dl.) Thresholds can also change over time in the individual.

2. *Inaccurate* - 20% to 60% of the measurements by patients are inaccurate. Urine glucose concentrations of 1% to 3% are regularly underestimated.

3. *Time discrepancy with blood* - There is always a time lag factor between the urine glucose result and the actual BG at the time of the test. Double voiding may reduce the lag.

4. *Cumbersome* - Performance, especially double voiding, is cumbersome and noncompliance is a problem.

subject (Fig. 1) is a clear indictment of urine testing. The wide range of plasma glucoses that can occur simultaneously with almost any level of urine glucose is striking.

If one considers that the majority of diabetic patients find urine testing disagreeable and cumbersome to perform and couples that with its inherent limitations, one should not be surprised that when another viable method of monitoring was developed, it became the method of choice.

Self-blood glucose monitoring (SBGM)

Self-blood glucose monitoring has achieved celebrity status as a clinical monitoring method in the last five years. Although portable glucose monitors were commercially available more than 15 years ago, the development of simple battery operated devices and reagent strips that can be read visually or by machine has stimulated tremendous interest in the application of SBGM.

TABLE 3

ADVANTAGES OF SELF BLOOD GLUCOSE MONITORING (SBGM)

1. Measures actual BG in a realistic, outpatient setting.
2. Can warn patient of impending hypoglycemia.
3. Can aid adjustment of insulin dosages.
4. The only safe way of adjusting insulin therapy if BG goal is less than the renal threshold (intensive regimens, pregnancy).
5. Invaluable educational tool.

TABLE 4

INDICATIONS FOR SBGM

1. Motivated, insulin-treated Type I and II diabetic patients, especially if target BG < 180 mg/dl.
2. Patients with particular problems with metabolic control or poor understanding of effects of meals, exercise, and insulins on BG.
3. Patients with abnormal renal thresholds.
4. Patients with hypoglycemia and especially suspected nocturnal hypoglycemia (3:00 A.M. BG will resolve questions).

In addition to their use by patients at home, glucose strips and monitoring devices have been applied in physicians' private offices, emergency wards,[10] intensive care units,[11] and on general hospital wards.[12] In these settings they have proved to be reliable, accurate and cost effective. The characteristics of SBGM that make it so attractive for patient use are included in Table 3. SBGM provides an accurate measurement of blood glucose which correlates well with laboratory performed glucose measurements (correlation coefficients from numerous studies invariably exceed $r=0.90$[13,14]). The assay is simple and painless to perform and provides the ability to measure glucose in the realistic, home setting. Because blood glucose is directly measured, there are no problems with renal thresholds or time lags. The use of SBGM is an integral part of intensive insulin therapy programs where preprandial insulin doses are adjusted according to the plasma glucose level. This form of feedback allows patients to control accurately and rigorously control their diabetes with minimal risk of hypoglycemia.

Although the appeal of SBGM on empirical grounds is almost overwhelming, what are the data to support the proposition that SBGM contributes to improved diabetic control? Although a number of studies have examined the acceptability of such monitoring and found it to be quite high,[15,16] few if any studies have focused on the contribution of SBGM independent of dietary, exercise and insulin adjustments. It is commonly ac-

TABLE 5

CHARACTERISTICS OF GLYCOSYLATED HEMOGLOBIN ASSAY

1. Glycosylated product of hemoglobin and glucose.
2. Proportional to blood glucose concentration and duration of exposure to variable blood glucose concentrations over preceding 2-3 months (integrated index).
3. Relatively unaffected by acute changes in glucose.
4. Correlates best with mean blood glucose measured during preceding 8 weeks.

TABLE 6

INDICATIONS FOR GLYCOSYLATED HEMOGLOBIN ASSAY

1. To follow degree of metabolic control in type I and type II patients. Measurement every 3-4 months can be used to judge efficacy of therapy or any change of therapy.
2. To assess degree of control in patients who cannot or do not perform other tests. Independent measure in unreliable patients.
3. To distinguish transient hyperglycemia (2° to MI, sepsis, etc.) from underlying glucose intolerance exacerbated by stress.
4. To clarify contradictory or confusing OGTT results.
5. To validate results from self blood glucose monitoring.
6. To determine whether intensively treated subjects (especially pregnant diabetics) are achieving intensive goals.

knowledged that in the absence of insulin adjustments, SBGM is relatively ineffective in improving diabetic control. Thus, SBGM must be considered in conjunction with regimens that include the adjustment of insulin, exercise and diet according to the blood glucose results. Whether intensive regimens with insulin pumps or multiple daily injections or more conventional regimens with once or twice per day intermediate and rapid acting insulins are considered, the evidence is strong that SBGM plays an important role in achieving improved diabetic control. Our experience at the Massachusetts General Hospital has reinforced this view. When insulin pump treated subjects decrease the amount of blood glucose testing, their metabolic control deteriorates significantly.[17] Reinstitution of more frequent monitoring results in lower mean plasma glucose and hemoglobin A_{1c} concentrations without increased hypoglycemia. Moreover, when we compare the mean hemoglobin A_{1c} levels of conventionally treated type I patients with the results of subjects who have learned to adjust their conventional injections on the basis of SBGM, the latter group has significantly lower hemoglobin A_{1c}'s (Figure 2).

Given the obvious flaws in urine testing and the advantages of SBGM, should it be used in all diabetics?

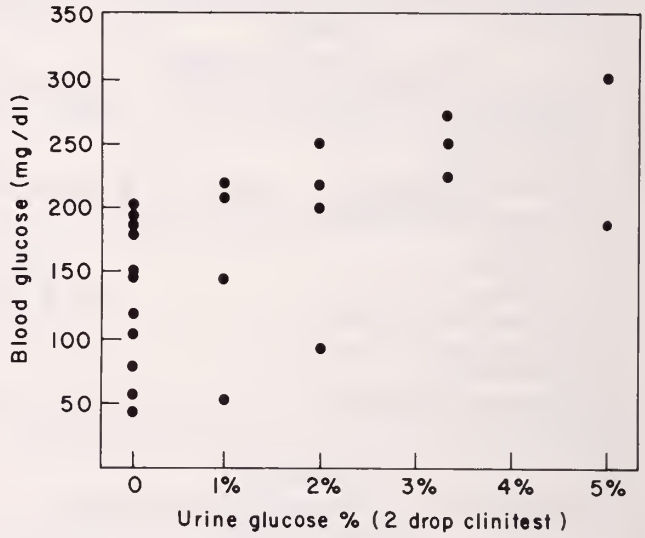

Fig. 1: Comparison of semi-quantitative urine glucose test with blood glucose concentration measured simultaneously in an insulin dependent diabetic.

In general, the patients who will benefit most from this testing are those subjects who learn to adjust their therapy appropriately. The following list of indications for SBGM seems reasonable at the current time (Table 4).

Glycosylated Hemoglobin

The use of glycosylated hemoglobin assays to measure the degree of chronic glucose control has provided a powerful tool for clinical care.[18,19] Although the information it provides tends to be used more by physicians than patients, it is of great interest to most patients since it gives a direct measurement of their overall glucose control.

The glycation or glycosylation of proteins exposed to glucose is a well recognized phenomenon. Most circulating and membrane bound proteins that have been studied in man have been shown to be glycosylated. The observation almost two decades ago that a minor fraction of hemoglobin was glycosylated in non-diabetics and that the fraction increases in magnitude in diabetic subjects,[20,21] led to the use of the hemoglobin A_{1c} (or A_1) assay in clinical practice. The bio-chemical reaction and kinetics[22] of the glycosylation are now well understood. More importantly, the relationship between mean plasma glucoses over time and the hemoglobin A_{1c} concentration[23] (Fig. 3) and the clinical utility of the assay have been well defined[24] (Table 5, 6).

In brief, the assay provides an objective measurement of mean plasma glucoses over the preceding two months that is relatively unaffected by the frequent

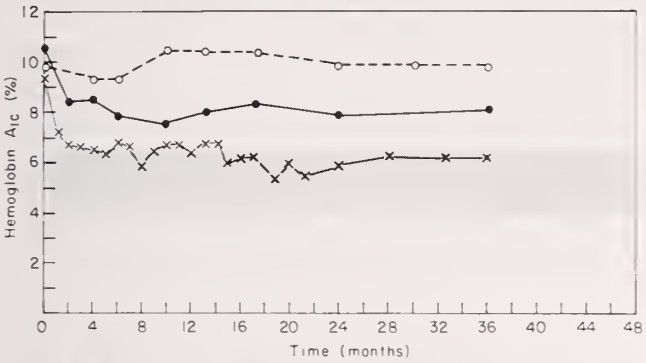

Fig. 2: Mean hemoglobin A_{1c} concentrations for 15 insulin-dependent subjects treated conventionally without self blood glucose monitoring (○--○), 15 subjects treated conventionally and adjusting insulin doses with self blood glucose monitoring (●--●), and 15 subjects treated with insulin pump or multiple daily injection therapy (x--x).
Hemoglobin A_{1c} measured with a high performance liquid chromatography assay after saline incubation to remove the labile fraction. Non-diabetic range 3.8-6.4%. Coefficient of variation < 2.5%.

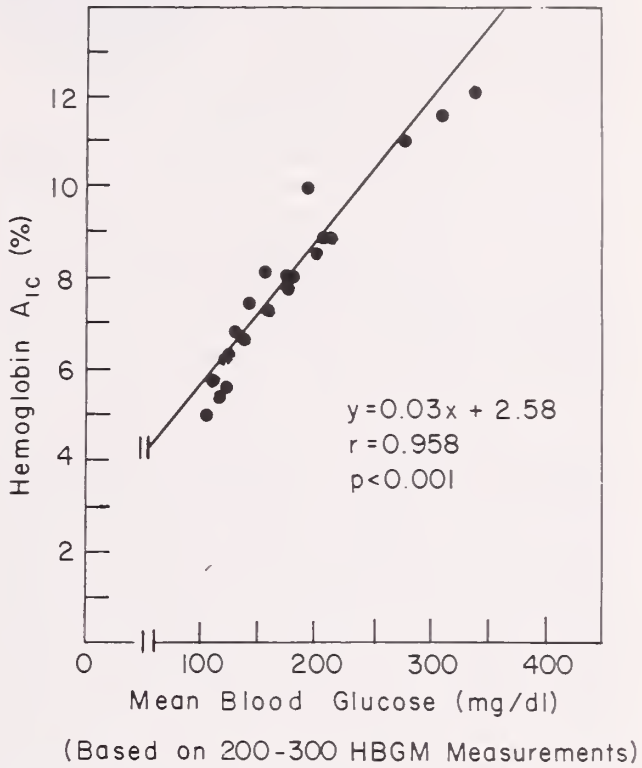

Fig. 3: Hemoglobin A_{1c} concentration compared with self blood glucose testing results. The mean blood glucose was calculated for each of 21 subjects who were performing frequent self blood glucose monitoring over 2 months. Approximately 65% of the tests were pre-prandial. At the end of the 2 month period, a single hemoglobin A_{1c} assay was performed and plotted against the mean plasma glucose.

fluctuations in plasma glucose. No single or combination of clinical factors such as clinical history, urine results, and sporadic plasma glucose measurements, can provide the same objective information.[24] When the assay is performed every two to three months it will inform the physician and patient how effective therapy has been in achieving the metabolic goal decided upon. For pregnant diabetic or intensively treated subjects, that goal usually falls within the non-diabetic range. Conventionally treated subjects and their physicians can determine how far above the non-diabetic range (Hgb A_{1c} 3.8-6.4% at the Massachusetts General Hospital) or how close to the type 1 diabetic mean (hemoglobin A_{1c} 9.4% at the Massachusetts General Hospital) they are. This information can be effectively used to set new, appropriate goals, stimulate subjects to put more effort into self-care, and reassure patients that their efforts have, in fact, produced measureable improvements. The assay is also useful to check the accuracy of subjects who perform frequent self blood glucose monitoring: if a discrepancy exists the error is almost always in the SBGM.

The hemoglobin A_{1c} assay provides the objective measurement that allows the physician and patient to determine easily and accurately the degree of metabolic control and progress. When coupled with SBGM to measure acute control, these two assays have removed much of the guesswork of diabetes management. New insights into the more physiological use of different insulin formulations and more frequent adjustments of pre-prandial rapid acting insulins have been reviewed elsewhere.[25-27] A hierarchy of insulin treatment regimens of increasing complexity is now available so that patient and physician, in concert, can choose the most appropriate and acceptable insulin and monitoring regimen for the individual.

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Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia, some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Transient amnesia or memory impairment has been reported in association with the use of benzodiazepines.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

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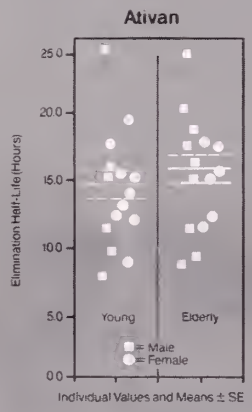

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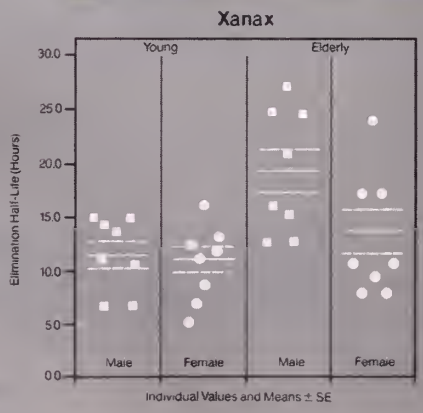

Xanax® (alprazolam)[3] CIV
Xanax® requires *oxidative* (P450) metabolism; significant differences in half-life are shown between young and elderly male subjects; half-life is minimally influenced by age in women.

References:
1. Greenblatt DJ: Clinical study, pharmacokinetics and bioavailability in the elderly. Ativan® (lorazepam). Data on file. Wyeth Laboratories.
2. Greenblatt DJ, Allen MD, Locniskar A, et al: Lorazepam kinetics in the elderly. Clin Pharmacol Ther *26*:103, 1979.
3. Greenblatt DJ, Divoll M, Abernethy DR, et al Alprazolam kinetics in the elderly. Arch Gen Psychiatry *40*:287, 1983.

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See important information on preceding page.

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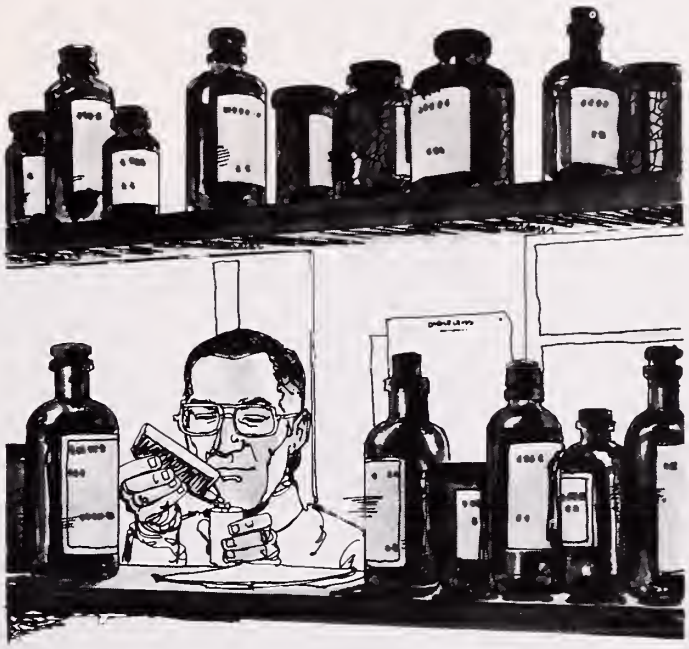
Take Thou

And stick it. Prescriptions may be suffering a certain decline from their honored and respected position as our tools of communication.

Increasingly the patient brandishes an empty bottle which some mindless computer has marked "no refills" after the prescription had specified refills. Another one is written. Why does the pharmacist call for approval of refills for digoxin or hydrochlorothiozide when the commonest sense knows the urgency of their continuation? How does it happen that the patient reports refilling the ampicillin three times when that prescription was marked no refill? What is the rationale for selling ibuprofen 200 mgs over the counter but requiring a prescription for 400 mg tablets? Why does that sweet little old lady watch the writing of three separate prescriptions with careful refill instructions before she says, "Would you call these in?"



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MATERNAL MORTALITY

The Maternal Mortality Committee was presented with the following information:

A 24-year-old married, white female, gravida 1, para 0, was brought to the emergency room of a 41-bed hospital, carried in by her husband, at 9:07 p.m. The husband said she had been complaining of low back pain in the last hour, went to the bathroom and fainted. He then brought her to the hospital. She was very pale, her skin was cold and moist. She was able to talk, but no blood pressure or pulse was obtainable. A few minutes later her pulse was described as weak and thready but unable to be counted. Her respiratory rate was 20. There were four physicians in attendance between 9:07 p.m. and the time she was pronounced dead at 10:15 p.m. Intravenous lines were started. A number 18 needle was inserted in the left antecubital vein and a number 16 needle was inserted in the right antecubital vein. An intravenous line was also established in the left external jugular vein with a number 16 needle. Palpation of the abdomen revealed distention, and tenderness. Her last menstrual period was given to be June 26th, 10 days prior to her being seen in the emergency room. It was described as normal. There had been no abnormal or intermenstrual bleeding. She had no history of vomiting or vaginal bleeding.

Four units of packed cells were given rapidly and an abdominal tap was performed that revealed gross blood in the peritoneal cavity. Thirty-eight minutes after being brought into the emergency room and the above therapy instituted, she stopped breathing. She was intubated with a number 8 endotracheal tube promptly without difficulty. During this period in the emergency room no blood pressure higher than 70 mm of mercury was obtained. A nasogastric tube was passed without evidence of gastric bleeding. A foley catheter was inserted in the urinary bladder and 30 ml of clear urine was obtained. During the entire period the patient was receiving 100% oxygen by mask. Sixty-eight minutes after she had been brought into the hospital, vital signs were absent, pupils were dilated and fixed, and she was pronounced dead.

An autopsy was obtained, her weight was 125 pounds, height 5 feet, 7 inches. The pertinent finding was the peritoneal cavity filled with blood, estimated at more than 1500 ml. The source of bleeding was a ruptured ectopic pregnancy involving the mid-portion of the left tube. Microscopic sections from this tube at the site of the rupture showed numerous placental villi and an amniotic sac. The cause of death was given as intraabdominal hemorrhage second to ruptured tubal pregnancy.

The Maternal Mortality Committee considered this case and classified it as obstetric nonpreventable, in that she was brought to the attention of the physicians at a very late stage of the disease. This case demonstrates the fact that an ectopic pregnancy can be a lethal disease and there is difficulty in diagnosis and caring for these people.

Epidemiologic studies show a continuous yearly increase in ectopic pregnancies in the United States. In 1967 there were 13,200 ectopic pregnancies in the United States.[1] By 1972 the number had risen to 24,500 and by 1977 there were 41,000 ectopic pregnancies reported. The incidence is now one-half to one percent of pregnancies. The disease is commonly thought to be highest among the young, sexually active, urban, nonwhite, low socio-economic populations and lowest among older, white, higher socio-economic groups.[1] Pelvic inflammatory disease patients have shown a similar increasing pattern of ectopic pregnancies. Proposed explanations for the increase in ectopic pregnancies are based upon the assumption that the primary etiology pregnancy is altered tubal function. The varied explanations include: 1) an increase in conservative treatment for pelvic inflammatory disease, with the widespread use of antibiotics, 2) the increase in tubal surgery that has taken place, 3) lysis of adhesions, 4) the surgical treatment of endometriosis, 5) the increase in the conservative surgery for ectopic pregnancy, 6) the increase in the number of tubal sterilizations and therapeutic abortions in recent years, and 7) rapid decline in the number of pregnancies over the past decade making the number of extrauterine pregnancies more clinically apparent, 8) an increased accuracy and early detection of ectopic pregnancy allows diagnosis of many ectopics that previously may have resorbed spontaneously.

The diagnosis is based upon a high level of clinical suspicion obtaining a thorough history, physical examination and laboratory findings. The above case represents an extreme situation but is presented because of its unique characteristics.

Recent new technologies including the radioimmunoasssay for HCG beta subunit, both qualitative and quantitated, have helped in the early diagnosis tremendously. This, coupled with pelvic ultrasonography and the use of laparoscopy, greatly aid in the early diagnosis of ectopic pregnancies before a lethal state is reached. The use of the beta subunit, human chorionic gonad-

otropin assay is valuable. In early pregnancy the level in the serum doubles every 48 hours, thereby, providing a useful mechanism for monitoring early pregnancy, when there are abnormal symptoms. When bleeding and pain accompany a positive pregnancy test the performance of the HCG test and the direction of the rise can be a great aid in a proper diagnosis. If values do not increase every 48 to 72 hours, then the possibility of persistent ectopic pregnancy is present. The other very useful test is pelvic ultrasonography. Ultrasonography is most useful in identifying a normal intrauterine pregnancy by detecting the gestational sac inside the uterus; thereby indirectly ruling out ectopic pregnancy. The ultimate diagnostic modality is laparoscopy. When the clinical suspicion of ectopic pregnancy is strong, the physician should not hesitate to perform this procedure.

A recent report by Dorfman, *et al*, delineates ectopic pregnancy mortality in the United States for the years 1979 to 1980.[2] The author confirmed 86 deaths among 102,100 cases of ectopic pregnancies. This group studied the clinical aspects of ectopic pregnancy mortality. According to their report, ectopic pregnancy has recently become a major cause of maternal mortality in the United States. Despite its increasing public health impact, relatively little is known about the clinical epidemiology of this condition. This report studied the characteristics of and risk factors for fatal ectopic pregnancy. It was found that 85% of the deaths were the result of hemorrhage. Abdominal and interstitial implantations were more likely to be symptomatic later in gestation and to be fatal than were tubal implantations. Of those deaths for which circumstances were known, a more prompt diagnosis and treatment by health professionals might have prevented one-half of the deaths. One-third of the deaths might have been prevented if the woman had notified or visited a physician more promptly after the onset of symptoms. It was concluded that ectopic pregnancy is a major health problem in the United States. Although mortality rates are declining, this analysis of clinical factors shows that the number of these deaths is still a pertinent problem. More than one-half of the deaths could have been prevented had the women presented earlier or their physician acted more expeditiously when symptoms were present. A physician must "think ectopic." Continued surveillance, education and prompt action by health professionals and by the patient will help to reduce the morbidity and mortality from ectopic pregnancy in the United States.

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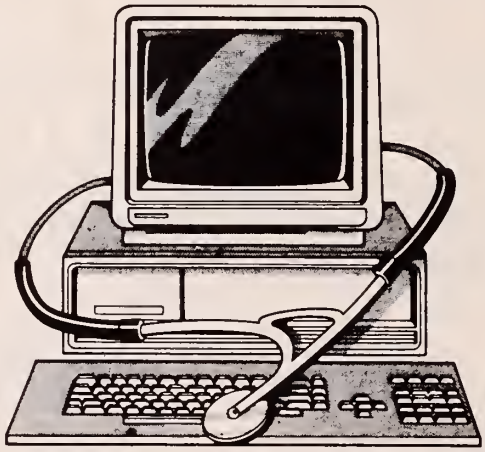

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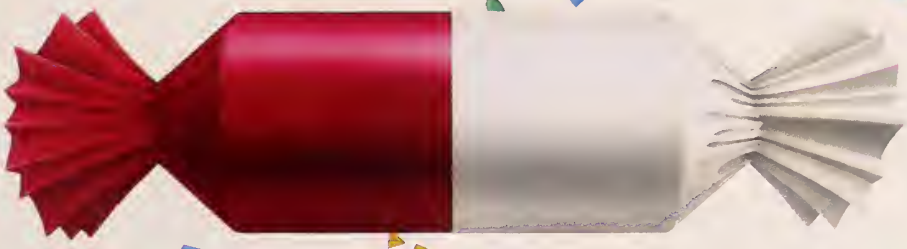

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Absence of Privilege

WILLIAM D. WEITZEL, M.D.

Demands are increasing for access to information that physicians learn about patients. Different historical bases for patient privacy, confidentiality, and privilege are distinguished. Behavioral guidelines for physicians in response to legal directives to report and the receipt of subpoenas are reviewed.

A middle-aged gentleman presented himself at the office without a referral with a request for help about a personal problem, ie, that he was secretly fondling his latency age daughter. His wife had discovered this behavior again after his two older daughters (past victims) had persuaded their younger sister to talk. The patient had sought help from physicians for this secret urge on two previous occasions—once in Illinois four years earlier and then again one year earlier in this city. The gentleman came to the office expecting privacy and a confidential relationship with his new physician (psychiatrist). What he didn't realize was that the information he provided was not privileged and once his new physician accurately understood the details of the sexual abuse of his daughter, state law required the physician to cause the patient to report himself to the local representative of the Bureau of Social Services or to make the report himself under threat of criminal penalty.

Confidentiality exists as an expectation rooted in tradition, law and medical ethics. Occasions for health professionals to break their professional confidences with patients are now more numerous and explicit. Each month our local health department asks us to report cases of certain infectious diseases. Report of sexual abuse of children is another such legal obligation.

Three different concepts need to be distinguished. **Privacy** is a necessary individual condition that is implied by our Constitution and can be over-ridden only by a compelling need of the state.[1] **Confidentiality** is an ethical obligation physicians impose on themselves and is defined in the Principals of Ethics of the American Medical Association and in the traditional Hippocratic Oath. Said another way, confidentiality in medicine is the expectation shared by patient and physician that a zone of privacy surrounds their dealings with each other.[2] **Privilege** is a legal evidentiary construct which provides exception to the usual rule that courts may require testimony as a means by which an alleged matter of fact is established or disproved during the investigation of judicial trial. Privileged communications do not exist unless explicitly permitted by enactment of law by the state legislature. But if professional communications are termed privileged, a breach of the concurrent confidentiality can result in a civil suit and the offender may be charged with slander (oral report) or libel (written report). The usual effect of the legal determination of privileged communication is that a witness cannot be required under legal compulsion to state the substance of the communication. This legal right belongs to the patient and not the provider of service.

Privilege originated in English common law in the 1500s and shielded lawyers from compulsory testimony about their clients and was extended to include priest-penitent and husband-wife relationships. Common law is a system of jurisprudence which is based on judicial precedent rather than legislative enactment and evolved from unwritten laws of England. All other existing privileged relationships do **not** have a common law origin and exist only if and exactly as specifically developed by a state legislature or Congress and later delineated further (compromised) by state or federal court decisions.

New York State was the first to enact a doctor-patient privilege statute in 1828 in order to encourage acknowledgement of shameful diseases, *eg*, tuberculosis and the state offered secrecy to those afflicted persons who obtained treatment. Kentucky remains one of a minority of states that have enacted neither physician-patient nor psychotherapist-client privilege statutes. Specific but different privilege statutes do exist for the following professional relationships: psychiatrist-patient[3]; psychologist-client[4]; licensed clinical social worker-client[5]; pastoral counselor (clergy)-penitent (client)[6]; and school counselor-counselee.[7] Child abuse reporting is the legislated exception to all privileged statutes except attorney-client and clergy-penitent and this is consistent with common law precedent.[8] If the gentleman in the foregoing example had consulted an ordained or accredited practitioner of an established church or religious organization (who may be reimbursed for his services as a pastoral counselor), his communication could have been considered privileged and remained private.[9] The privileged communication statute for psychologists is simple and is placed upon the same basis as that provided by law between attorney and client whereas the statutes for psychiatrists and licensed clinical social workers have numerous exceptions.

Legal tradition requires that four criteria be met before a communication should be considered privileged (an exception to the rule of evidence): 1) The communications must originate in a confidence that they will not be disclosed. 2) The element of confidentiality must be essential to the full and satisfactory maintenance of the relationship between the parties. 3) The relationship must be one that in the opinion of the community ought to be fostered. 4) The injury that would inure to the relationship by the disclosure of the communication must be greater than the benefit thereby gained for the correct disposal of litigation.[10]

Arguments for a privileged communication statute in medicine include: 1) The belief of physicians that if we ask our patients to confide their inner most thoughts, feelings and fears, then secrecy must be paramount. 2) Members of our society must be able to expect that confidences shared with the physician are respected in order for our efforts to have a continuing value. 3) Information we learn is often so subjective that it is usually not useful to a trier of fact (court). 4) A court can always arrange for an administrative and independent examination.

Arguments against a privileged communication statute include: 1) The judicial principle of full disclosure and the rule that every individual owes the court his evidence which allows for the rigors of the adversary system as the best chance at arriving at truth. 2) General trends in states with medical privilege statutes have been toward greater restriction. In 1938, the American Bar Association Committee on Improvement in Laws of Evidence recommended that privilege decisions be made at the discretion of the court. In 1969, the American Bar Association rejected the Committee on Rules of Practice and Procedure's model privilege provision and proposed the abolition of all privilege statutes for physicians.

Since there are so many exceptions to privileged communication statutes for mental health professionals and no privilege statute at all for physician-patient relationships, how should a health professional behave when there is an occasion to betray a patient's privacy and the confidential relationship under court order? On some occasions, there is a positive injunction to report, *eg*, suspected child abuse, and in other situations, there will be a coercive written legal summons (subpoena).

"Kentucky remains one of a minority of states that have enacted neither physician-patient nor psychotherapist-client privilege statutes."

What to do if a subpoena is received? What was once the right of English kings to demand is now often a mechanical event executed by a clerk, ie, doctors are subpoenaed to appear as witnesses in court or to release a patient's records. Any lawyer with a pending case can get a subpoena from a court clerk. In some states, a lawyer can get a subpoena even before a lawsuit is filed.[11] Although a subpoena is a legal formality, to disregard the compulsory court directive invites a citation for contempt of court. Subpoena *duces tecum* requires a witness to have under his control documents relative to a controversy and to bring such items to court during the trial. Examples of information required include any knowledge pertinent to divorce and/or child custody proceedings, disability adjudication, criminal conduct.

Often a subpoena is delivered in person (handed to the physician) but this varies with jurisdiction. The subpoena may be delivered by mail from another state. As a practical matter, when a subpoena is received,

the physician should notify his patient and report that past communications are "at risk" in a court of law. The physician may learn that the patient is responsible for the subpoena or that the patient is unwilling to release information or to have the physician testify or release records. If permission to cooperate is granted, it should be obtained in writing from the patient to the physician. Also, in deciding what to do with a subpoena, the physician needs to involve attorneys, either his own or his patient's, and sometimes attempt to quash or modify the subpoena or at a minimum to develop a strategy of non-compliance. This approach protects the physician from any claim of abuse of the patient's confidentiality. A physician may still be legally required by a judge to divulge information. Since psychiatrists in Kentucky are covered by a privilege statute, such a physician should write a letter to the court with a copy to the attorney who sent the subpoena and request a court order (from the judge) because of the belief that the records contain privileged information. If the court order arrives, the physician is free to turn over the records without liability. At a minimum a written statement should be sent to the subpoenaing attorney that the records are being released over your objections if the patient has refused permission.

Our duty as treating physicians is to comply with the strict requirements of the law but not to volunteer more than is asked and if subpoenaed, to function as a factual witness and not as an expert witness. A factual witness provides answers to such questions as who, what, when, where, how, and for how long. An expert witness is expected to do that and more, specifically, answer questions as to why and how come. A physician may also formally ask for an *in camera* (chambers) hearing in which the judge may review records and ask questions prior to questioning in open court. This review may result in restrictions as to which records are introduced as evidence and even as to what questions are pertinent to the issue before the court and thereby protect, in part, a patient's privacy.

When our professional relationship with our patient is compromised and we are asked to betray private personal information that no longer can be kept confidential (let alone be protected by a privilege statute), four questions need to be answered: 1) What is going on? The answer is that a decision has been made that society's need in a court setting to know all the facts (evidence) has over-ridden an individual's right to personal privacy. 2) To what principles should a physician appeal? Adhere as closely as you can to the ethical codes of our profession, ie, do what is right rather than pragmatic. 3) Who decides what is to be done? The patient and the physician who really know what is known. 4) How should a physician behave? Act deliberately and with consultation (including your own attorney) with the intent of upholding the individual integrity of self, patient, and profession.

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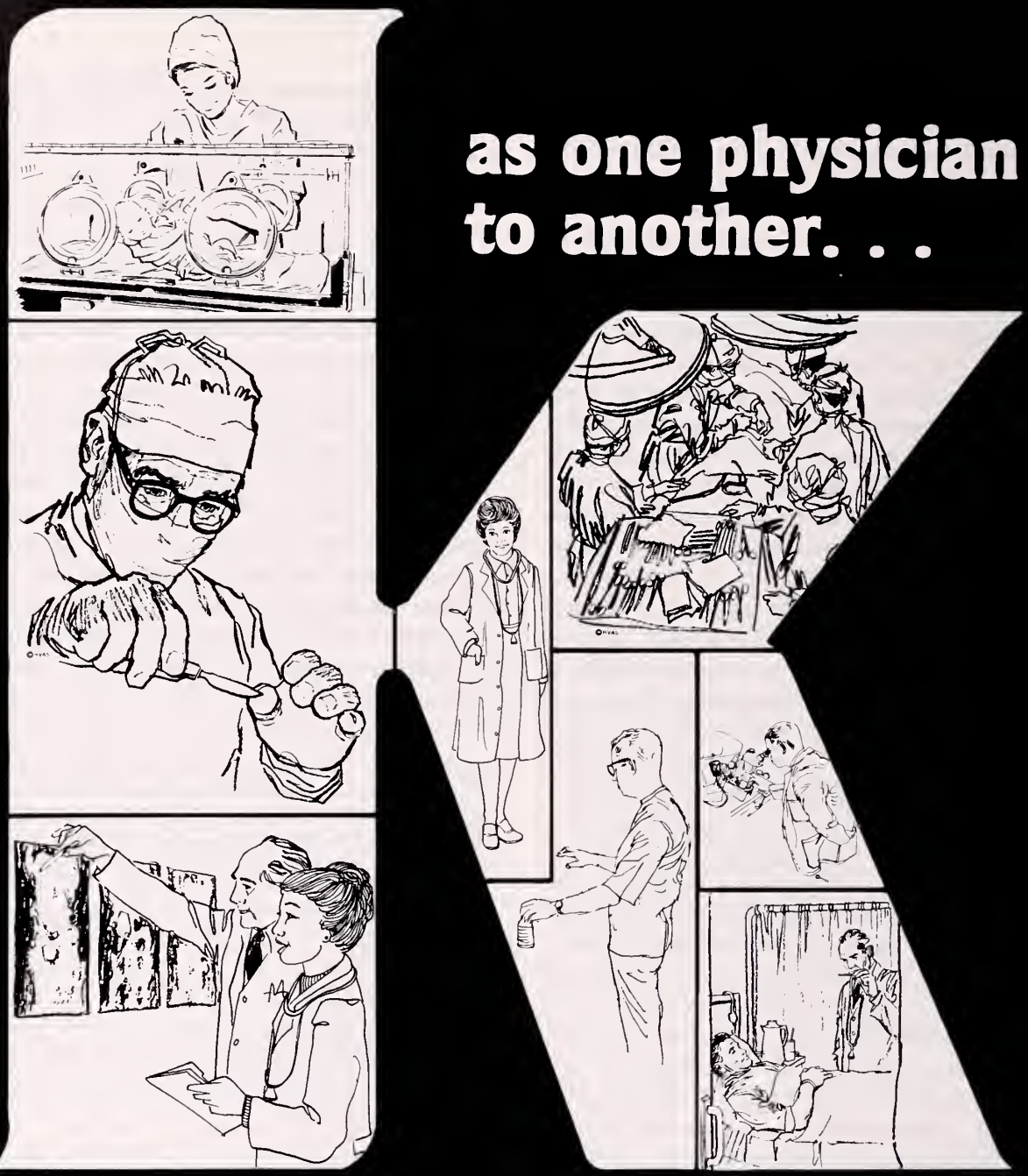

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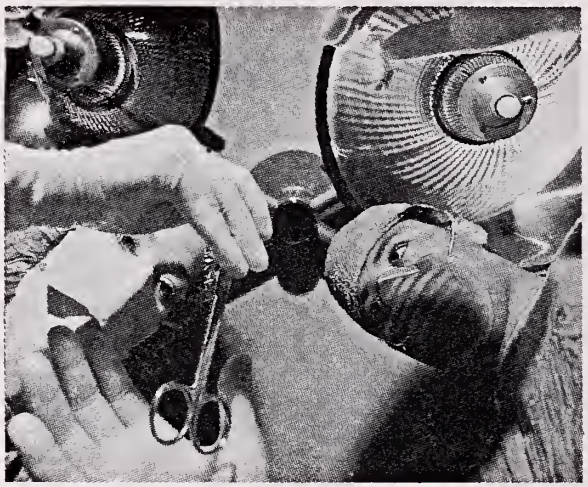

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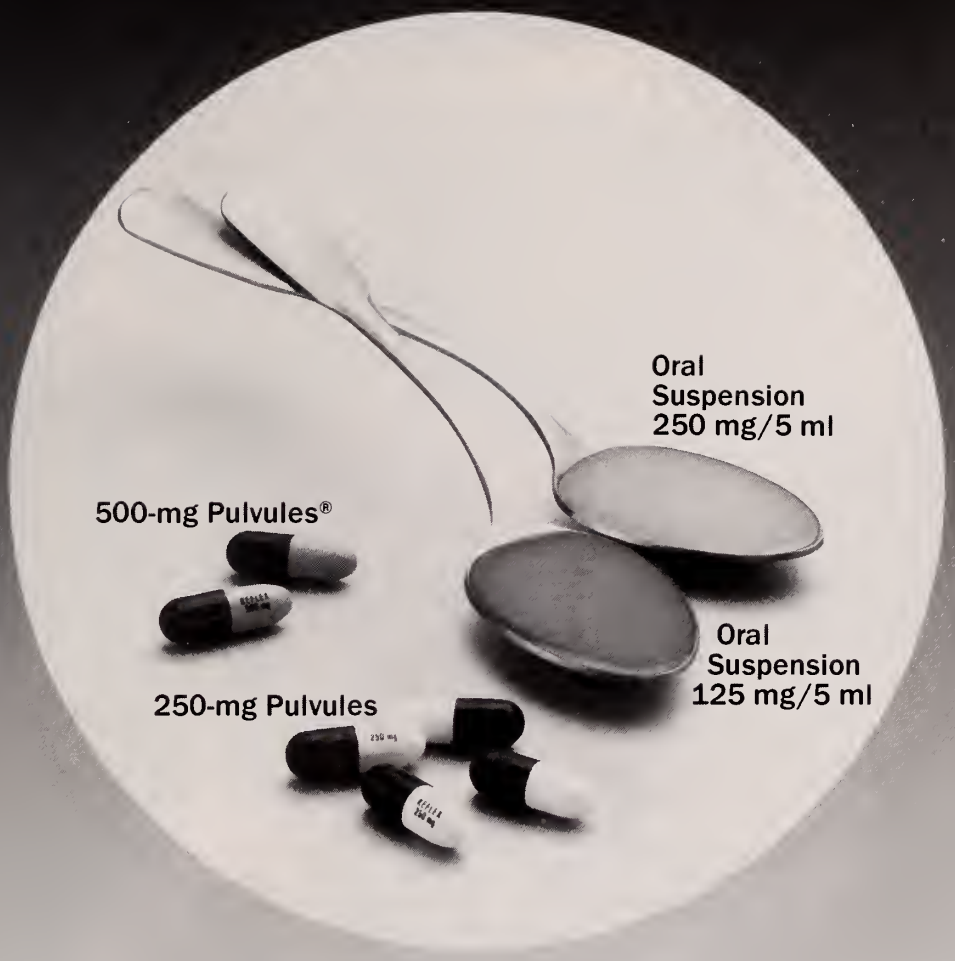

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Cardiovascular contraindications to the use of Isoptin are similar to those of beta blockers: severe left ventricular dysfunction, hypotension (systolic pressure <90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no artificial pacemaker is present) and second- or third-degree AV block.

So, the next time a nitrate is not enough, add Isoptin... for more comprehensive antianginal protection without side effects which may cramp an active life style.

ISOPTIN. Added antianginal protection without beta-blocker side effects.

Please see brief summary on following page.

ISOPTIN®
(verapamil HCl/Knoll)
80 mg and 120 mg scored, film-coated tablets

Contraindications: Severe left ventricular dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (except in patients with a functioning artificial ventricular pacemaker), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction < 30% or moderate to severe symptoms of cardiac failure) and in patients with any degree of ventricular dysfunction if they are receiving a beta blocker. (See *Precautions.*) Patients with milder ventricular dysfunction should, if possible, be controlled with optimum doses of digitalis and/or diuretics before ISOPTIN is used. (Note interactions with digoxin under *Precautions.*) ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild and controlled by decrease in ISOPTIN dose). Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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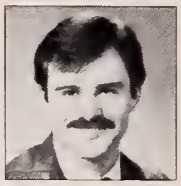

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Year-End 1985 Membership Shows Increase

Total dues-paying membership for KMA was up 1.8% at the end of 1985. Overall, KMA members total 4,685 in all categories, a 6.4% increase over 1984. Forty-nine county medical societies showed both a gain in the number of members and a percentage increase during the past year.

Physicians in 23 counties can boast of having 100% KMA membership. Five of those counties (noted below) had 100% membership for KMA and AMA.

Counties with 100% KMA Membership

Ballard	*Hickman	Owen
*Butler	Lee	Rockcastle
Carroll	Lyon	Russell
Carter	Marion	*Spencer
Clinton	McLean	Washington
Elliott	*Metcalfe	Wayne
Grant	Morgan	*Wolfe
Hancock	Nicholas	(*100% KMA & AMA)

AMA membership also increased in 1985, both nationwide and in Kentucky. Currently, a little more than half of KMA Active Members belong to their national professional organization. The following "Savings Comparison Chart" points out the many professional and personal benefits an AMA member enjoys:

Savings Comparison Chart

If an AMA member were to take advantage of these member benefits during a year, he would save $523.75.

In addition, the AMA's Members Retirement Plan offers substantial savings:

If a physician chooses a mutual fund for his Keogh Plan, he will probably pay an 8 1/2% sales charge plus a fee to his accountant or attorney for preparing annual IRS and Department of Labor reports.

If a physician invests in the AMA Fixed Income Fund, only a 6/10 of 1% administrative fee is charged for all investment and administrative services.

If the physician invests in the AMA Equity Fund, an 85/100 of 1% fee is charged and, as with the Fixed Income Fund, the fee is taken from investment funds before individual account values are computed.

For example:	Amount of Sales Charge/ Administrative Fee
$10,000 invested in a Keogh Plan	$850.00
$10,000 invested in the AMA Equity Fund	85.00
AMA MEMBER SAVINGS	$765.00

Thus, if a member utilized the AMA Equity Fund as outlined above in addition to the other above-listed services, savings compared to a nonmember would total $1,288.75.

Resource Material Available

Marketing—KMA members interested in receiving a copy of the "Marketing Guide for Physicians" should contact the KMA Office. This 14-page booklet deals with marketing concepts and various aspects of practice management and is available at no cost to members of the Association

Women Physicians—A resource packet on the work patterns, practice characteristics and incomes of female physicians has been prepared by the AMA Women in Medicine Project. Copies of the 63-page document, "In the Marketplace," are available from AMA, 535 N. Dearborn St., Chicago, IL 60610 – (312) 645-4391.

	Non-Member Cost	Member Cost	Member Savings
JAMA	$52.00	$00.00	$52.00
Specialty Journal	30.00	00.00	30.00
American Medical News	30.00	00.00	30.00
Book entitled "Current Procedural Terminology" (CPT)	27.50	24.75	2.75
Video Clinic Course entitled "Neurological Examination"	120.00	85.00	35.00
Standard Market Area Profile	170.00	119.00	51.00
Placement Service	50.00	00.00	50.00
MINET*	340.00	220.00	120.00
AMA Library-computer document search	45.00	00.00	45.00
Practice Management Workshop, "Marketing Strategies for Private Practice"	275.00	225.00	50.00
Practice Management video cassette, "Developing a Marketing Plan..."	85.00	70.00	15.00
Physician Recognition Award	25.00	00.00	25.00
Hertz Rental Car	55.00	37.00	18.00
	$1,304.50	$780.75	$523.75

*Assumes minimum monthly utilization charge for one year.

"He flourished during the first half of the 20th century."

The American physician isn't extinct. But your freedom to practice *is* endangered. Increasing government intervention is threatening the quality of medicine—and your right to function as an independent professional. The government, responding to cost containment pressures from myriad sources, has taken a more active role in legislating reimbursement methods, payment levels and even access to care.

In your fight for survival, the American Medical Association is your best weapon. The AMA is the most influential force in health care. No other organization can so effectively reach the national policymakers who will help determine your future and the future of medicine.

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For more information, call the AMA collect (312) 645-4783, or return this coupon to your state or county society.

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- With Health Planners
- On State Councils Committees & Boards
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- At Public Hearings
- To the Public—Your Patients

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Your dues support these and many other KMA activities.

Shouldn't ALL Kentucky Physicians share in this support?

Almost 1/4th of the physicians in this state are benefitting from your support without sharing in the commitment of membership.

Send us the name of a colleague who SHOULD be a KMA member -

NAME _____

ADDRESS _____

CITY/ZIP _____

RECOMMENDED BY (optional) _____

Mail to:

Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, KY 40205

NEW MEMBERS

Boone County

Bourbon County

Liza Levy, M.D.

Boyd County

Randall E. Bowsman, D.O.

Campbell County

David M. Barbara, Jr., M.D.
Michael W. Grainger, M.D.

Casey County

Christian County

Clay County

Daviess County

David E. Danhauer, M.D.
Michael Fred Yeiser, M.D.

Fayette County

Kurt R. Volk, M.D.

Fleming County

Floyd County

Rodney Handshoe, M.D.
Akram Mahmoud Hassanyeh, M.D.

Fulton County

Graves County

Jeffrey Scott Clarke, M.D.

Greenup County

Subhash Khosla, M.D.

Hancock County

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Harlan County

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Teresa A. Blessinger, M.D.
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Rudolph F. Licandro, M.D.
Alan I. Roth, M.D.
Greg S. Steinbock, M.D.
Leslie Strouse, M.D.
Suri R. Suresh, M.D.
Bruce J. Tasch, M.D.
Rebecca Terry, M.D.
John A. Waters, M.D.
Howard O. Wiles, III, M.D.
Russell A. Williams, M.D.

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Susan Kramer, M.D.
Nancy Kursik, M.D.

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Rajan R. Joshi, M.D.
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Robert Paul Landsberg, M.D.

Woodford County

Kentucky Medical Association Annual Meeting September 22-25, 1986 Ramada Inn East & Convention Center Louisville, Kentucky

SCIENTIFIC SESSIONS

"The Aging Patient" is this year's theme of the general scientific sessions morning programs on Sept. 23, 24 and 25. The Scientific Program Committee has invited international, national and state speakers to cover topics including: atherosclerosis; Alzheimers Disease; visual impairments and nutrition.

SPECIALTY GROUPS

Programs for 20 specialty groups will be held during the afternoons of Sept. 23, 24 and 25. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be held in the Ramada Inn East & Convention Center.

CME CREDIT

Physicians attending general sessions and specialty groups meetings will qualify for Category 1 credit. Total number of accredited hours is pending.

KMA HOUSE OF DELEGATES

The opening meeting of the House of Delegates will be held Monday, Sept. 22, at 9 a.m. in the Julia Belle Room of the Convention Center. Reference Committee meetings will begin at 2 p.m. on Monday and the final meeting of the House will begin at 6 p.m., Wednesday, Sept. 24. Officers for the 1986-87 Associational year will be elected during the final House meeting.

PRESIDENT'S LUNCHEON

This year's guest speaker during the President's Luncheon on Wednesday, Sept. 24, is **John J. Coury, Jr., M.D.,** AMA President-Elect. The Luncheon will also include presentations of KMA awards and the installation of the 1986-87 KMA President Richard F. Hench, M.D.

OTHER ACTIVITIES

The Annual **KEMPAC Seminar** will be held Monday, Sept. 22, at the Bluegrass Convention Center. A reception begins at 6 p.m. with dinner at 7 p.m. The **Second Annual McDowell/Crawford Ball** is scheduled during the Annual Meeting. Details will be available soon. **Scientific and Technical Exhibits** will be on display featuring new medical products, services and techniques. Members and guests have an opportunity to visit this area during the 30 minute intermissions scheduled throughout the general sessions and specialty group meetings.

Belle of Louisville, this country's last authentic excursion sternwheeler makes her home port at 4th and River Wharf. The gracious old steamboat takes thousands of people on cruises up the Ohio River each year.

ENTERTAINMENT

Hosting this year's KMA Annual Meeting is the newly remodeled Ramada Inn East & Convention Center. Overnight guests can request smoking or nonsmoking hotel rooms. Parking is free to all guests.

After attending meetings during the day, there are plenty of places to enjoy entertainment or relax. The Ramada features a RecreAtrium—a three-story glass enclosure with two pools, sauna, whirlpool and wading pool.

The hotel and convention center are easily accessible to interstates 64 and 71, the airport and a number of sightseeing attractions. Shopping malls, theaters and restaurants are all within minutes of the hotel.

For special attractions, visitors can ride on the **Belle of Louisville**, visit the **J.B. Speed Museum** and the **Louisville Zoo.** Two historical homes open to the public are **Locust Grove,** built in 1790, the last home of George Rogers Clark, Louisville's founder; and **Farmington,** built in 1810 from a design by Thomas Jefferson. Both homes feature period or original furnishings and operate gift shops.

Additional information on the Annual Meeting will be published in upcoming issues of the KMA *Journal* and "Communicator." Physicians can contact their own specialty groups for more information on afternoon programs.

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"HERPECIN-L appears to actually **prevent** the blisters . . . used **soon enough.**" DDS, MN

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"(In clinical trials) . . . **response** was **dramatic. HERPECIN-L** . . proven **far superior.**" DDS, PA

"All patients claimed **shorter duration** . . . at **prodromal symptoms** . . . HERPECIN-L **averted** the attacks." MD, AK

OTC. *See P.D.R.* for Information. For samples to make your own clinical evaluation, write: CAMPBELL LABORATORIES, INC., P.O. BOX 812-MD, FDR STATION, NEW YORK, N.Y. 10150

In Kentucky HERPECIN-L is available at all *Begley, Revco, SupeRx, Taylor Drug Stores* and other select pharmacies.

CLASSIFIED

All advertisements must be approved by the Board of Editors. Deadline is the first of the month two months preceding the month of publication. Charges for advertising are: 20¢ per word. Average word count: 7 words per line. $5.00 minimum. Send payment with order to: The Journal of KMA, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

KENTUCKY: Two FT experienced career Emergency Physicians needed to join staff of current client hospital in northeastern Kentucky. Compensation approximately $60,000 plus malpractice provided. Send CV or call Susan Winn, Coastal Emergency Services, 5885 Ridgeway Parkway, Ste. 113, Memphis, TN 38119; (901) 767-1301.

KENTUCKY: Two experienced Emergency Physicians for nights and weekends hospital. Annual volume 15,000. Compensation approximately $60,000 plus malpractice insurance provided. Send CV or call Susan Winn, Coastal Emergency Services, 5885 Ridgeway Parkway, Ste. 113, Memphis, TN 38119; (901) 767-1301.

1986 CME CRUISE/CONFERENCES ON SELECTED MEDICAL TOPICS—Caribbean, Mexican, Hawaiian, Alaskan, Mediterranean. 7 - 12 days year-round. Approved for 20 - 24 CME Cat. 1 credits (AMA/PRA) & AAFP prescribed credits. Distinguished professors. FLY ROUNDTRIP FREE ON CARIBBEAN, MEXICAN MEDITERRANEAN, ALASKAN CRUISES. Excellent group fares on finest ships. Registration limited. Pre-scheduled in compliance with present IRS requirements. Information: International Conferences, 189 Lodge Ave., Huntington Station, N.Y. 11746. (516) 549-0869.

Kempac Elects Officers For 1986

Pictured below are the 1986 KEMPAC officers elected at the KEMPAC Board of Directors Meeting held in Frankfort on January 8, 1986. Pictured left to right are: **Harold L. Bushey, M.D., Chairman; Francis Halcomb, M.D., Secretary; Marion A. Douglass, M.D., Assistant Treasurer and John D. Noonan, M.D., Vice Chairman. Walter H. Zukof, M.D.,** not pictured, is the Treasurer.

The KEMPAC Board encourages you to give your opinions both vocally and in writing to the KEMPAC Board or the director in your respective area. The districts and directors are: *First Congressional District*—John D. Noonan, M.D.—2018 Broadway, Paducah, KY 42001; *Second Congressional District*—M.A. Douglass, Jr., M.D.—Magnolia, KY 42757. Francis Halcomb, M.D.—217 W. Main St., Scottsville, KY 42164; *Third Congressional District*—K. Thomas Reichard, M.D.—Suite 7A Suburban Medical Plaza, Louisville, KY 40207, Walter H. Zukof, M.D.—7512 Old Shepherdsville Road, Louisville, KY 40219; *Fourth Congressional District*—Charles F. Allnutt, M.D.—2660 Shaker Road, Lakeside Park, KY 41017, John S. Spratt, M.D.—529 S. Jackson, Louisville, KY 40202; *Fifth Congressional District*—Harold L. Bushey, M.D.—406 Knox Street, Barbourville, KY 40906. Carmel Wallace, Jr., M.D.—373 Bold Ruler Trail, Corbin, KY 40701: *Sixth Congressional District*—David B. Stevens, M.D.—1900 Richmond Road, Lexington, KY 40502; *Seventh Congressional District*—Paul E. Lett, M.D.—4551 Brenda Drive, Ashland, KY 41101; *Represent Auxiliary to KMA*—Mrs. James W. Davis (Barbara)—1604 Sylvan Way, Louisville, KY 40205, Mrs. Wally O. Montgomery (Gerry)—3690 Marlborough Way, Paducah, KY 42001, Mrs. Russell Lee Travis (Sara Gail)—744 Cottage Grove Lane, Lexington, KY 40502, Mrs. William R. Yates (Phyllis)—277 Allentown Drive, Ft. Mitchell, KY 41017.

Appointments to fill the three vacancies on the KEMPAC Board will be made by the KMA Board of Trustees at its meeting in April.

K. I. S. S.

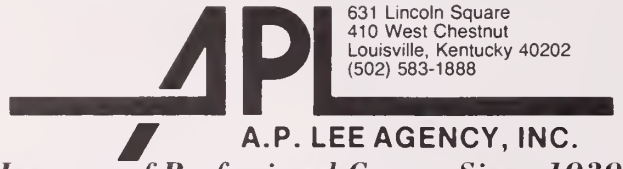
Nearly every business seminar presented has the above for advice—Keep It Simple Stupid!

We do run a simple business and simply pay most claims for disability the day they're received, have an answering device when we can't be in the office to allow prompt and simple answers. In general, we try to make it easier for our clients.

If you don't have coverage with us— or even if you do but have never had a claim—ask a colleague who has filed a claim how he fared.

We're proud of our operation!

KENTUCKY MEDICAL ASSOCIATION
DISABILITY INCOME PROGRAM



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CME

APRIL

3-5 Leukemia Society of America, Hyatt Regency, Louisville. (502) 584-8490.

11-12 Aggressive Management of Diabetes and Obesity, Hyatt Regency Hotel, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, University of Kentucky, Lexington, KY 40536-0086. (606) 233-5161.

18-19 Contemporary Pediatrics for the Practicing Physician, Hyatt Regency Hotel, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, University of Kentucky, Lexington, KY 40536-0086 (606) 233-5161.

21 The Beverly Towery Lecture, ACB Auditorium, Louisville, Kentucky. Contact: Gerald D. Swim, Director, CME, School of Medicine, University of Louisville, Louisville, KY 40292. (502) 588-5329.

24-26 12th Annual High Risk Pregnancy Symposium, Hyatt Regency, Louisville, Kentucky. Contact: Gerald D. Swim, Director, CME, School of Medicine, University of Louisville, Louisville, KY 40292, (502) 588-5329.

25-26 Third Annual Cancer Symposium, Paducah, KY

MAY

18-23 Seventeenth Family Medicine Review - Session II, Hyatt Regency Hotel, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, University of Kentucky, Lexington, KY 40536-0086, (606) 233-5161.

JUNE

13-14 Update in OB-GYN, Hyatt Regency Hotel, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, University of Kentucky, Lexington, KY 40536-0086, (606) 233-5161.

SEPTEMBER

12-14 3rd Annual Multispecialty Oculoplastic Surgery Symposium, Lexington Marriott Resort, Lexington, Kentucky. Contact: Doctor Constance M. Fulmer, Director of Medical Education, Good Samaritan Hospital, Lexington, KY 40508, (606) 252-6612 Ext. 3156.

Application for Scientific Exhibits

1986 Annual Meeting — Kentucky Medical Association

Ramada Inn—Bluegrass Convention Center — Louisville, Kentucky — September 23-25

1. Title of exhibit _____

2. Name(s) of exhibitor(s) _____

   Address _____

   Professional title _____

3. Institution if other than exhibitor _____

4. Amount of backwall footage required _____
   (The draped booth has 4' side walls. This footage should not be included in backwall footage required.)
   SHELF DESIRED? _____ (Table 2' deep X width of backwall footage) Electrical outlet desired _____

5. Will summary printed matter be available or obtainable for the interested physician? _____

6. Indicate sources of assistance provided to you in connection with this exhibit _____

7. Has this exhibit been displayed before? If so, when & where? _____

8. It is required that you attach a rough sketch or photograph and a brief outline of your exhibit to include: (a) content of the presentation, and (b) the method, eg., equipment to be used.

Date _____

_____
Signature of Applicant

Fill Out and Mail to:

RICHARD A. KIELAR, M.D., Chairman
Scientific Exhibits Committee
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

Applications for space should be received before June 1, 1986

- KMA provides, without cost to the exhibitor, one 2 ft. Table as shelving, bracket lights and a title sign.
- Spotlights, view boxes, furniture, decorations, etc., may be furnished by the exhibitor or may be rented, if desired, by applying directly to the George E. Fern Company, 328 Louisville Air Park, Louisville, Kentucky 40213.
- *Commercial* exhibit materials and handouts are prohibited in the Scientific Exhibit area.
- Transportation and erection costs are the responsibility of the exhibitor.
- Exhibit *must be attended* during intermissions to answer physicians' questions. It is also desirable to have someone in attendance throughout the program.
- Equipment which will create noise must not be used during the general sessions and, at other times, must be controlled by head or earphones or a muffling device.
- Exhibit must be dismantled and removed by 4:00 P.M., Thursday, September 25, 1986.
- Exhibit space is *strictly limited* to footage and space allotted. No exhibit may extend into the aisle.

Ramada Inn—Bluegrass Convention Center and the Kentucky Medical Association or its agents cannot guarantee against loss or damage and will assume no liability for damages nor guarantee the exhibitor against loss of any kind. The exhibitor agrees, with the Association, to be responsible to the Ramada Inn—Bluegrass Convention Center for damages that may occur as a result of the exhibitor's use of the *facility*.

ACCREDITATION

KAFP allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. AMA allows up to 10 hours for AMA Category I credit.

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This means that Kentucky physicians can obtain coverage for their medical practice, homes, cars and other possessions, at very attractive rates, from companies that really have their best interests in mind.

Pico's insurance services in Kentucky are endorsed by the Kentucky Medical Association and are offered through KMA Insurance Agency, Inc., in cooperation with the Marketing Department of the Kentucky Medical Insurance Company. Call or write for more information.

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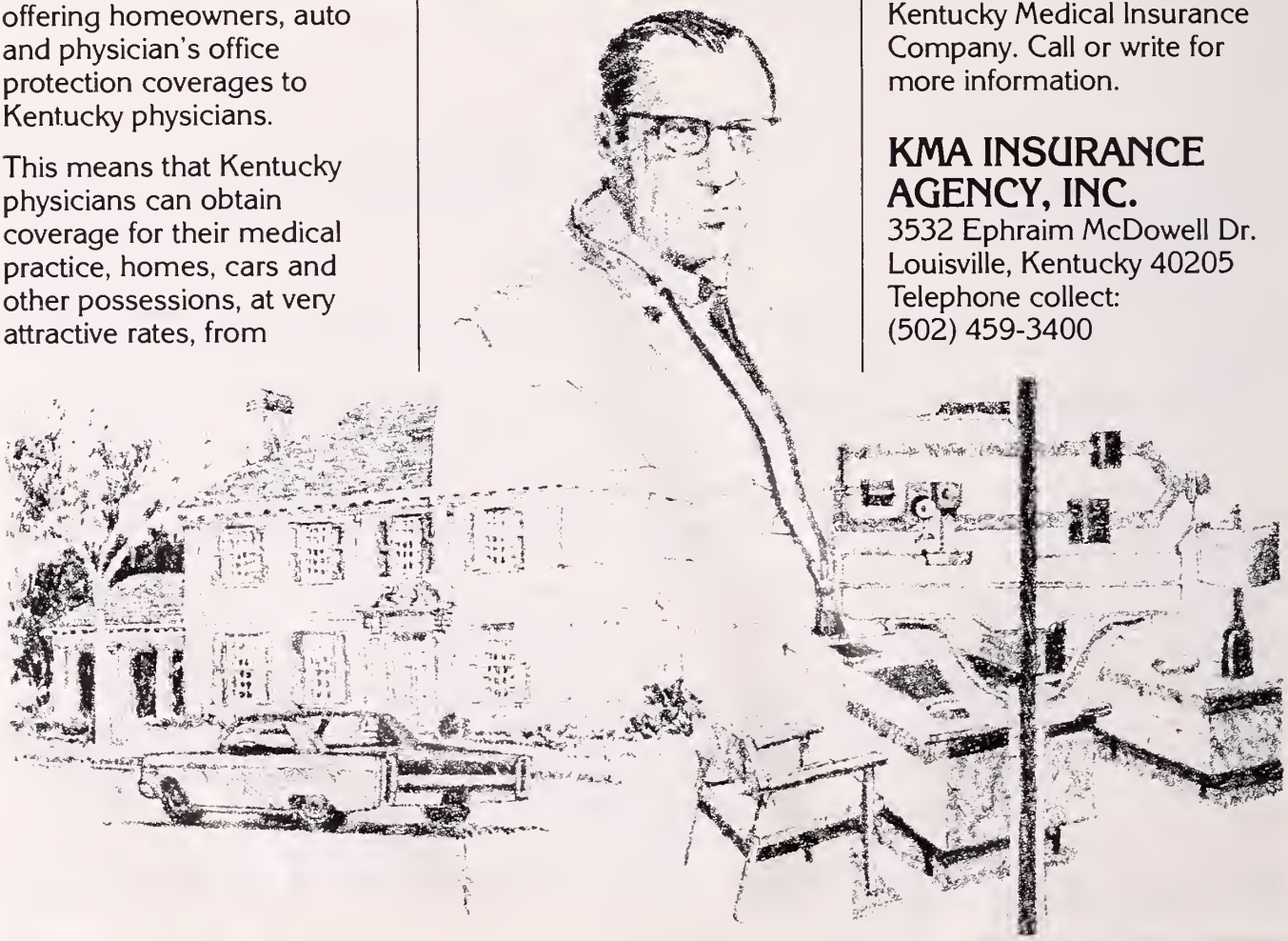

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2. Drinking to handle problems or relieve symptoms.

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4. Surreptitious drinking or gulping of drinks.

5. Tendency toward making alibis and weak excuses for drinking.

6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.

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9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.

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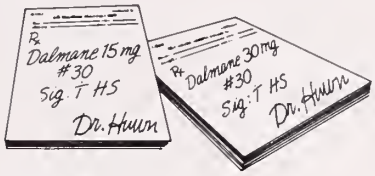

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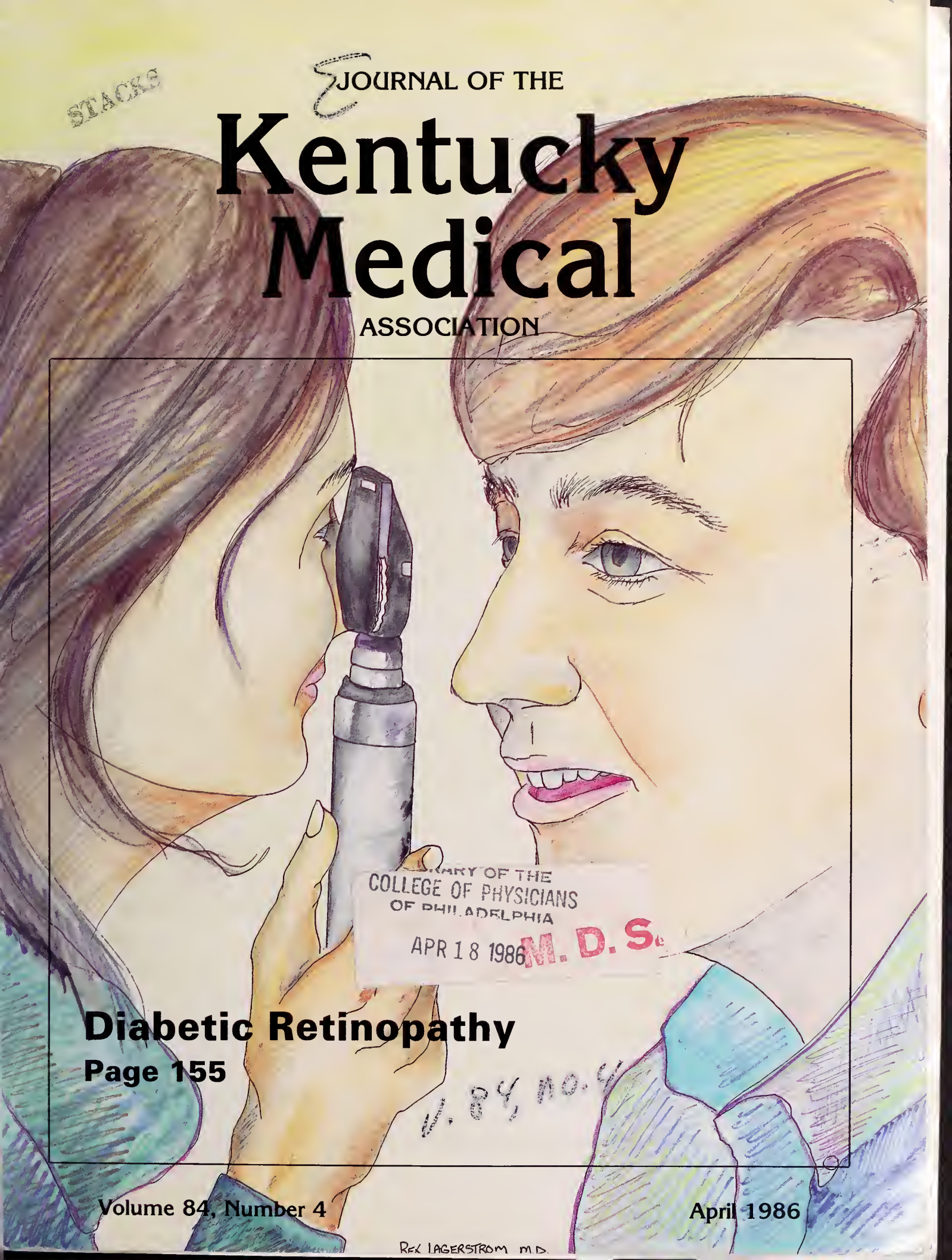

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Diabetic Retinopathy

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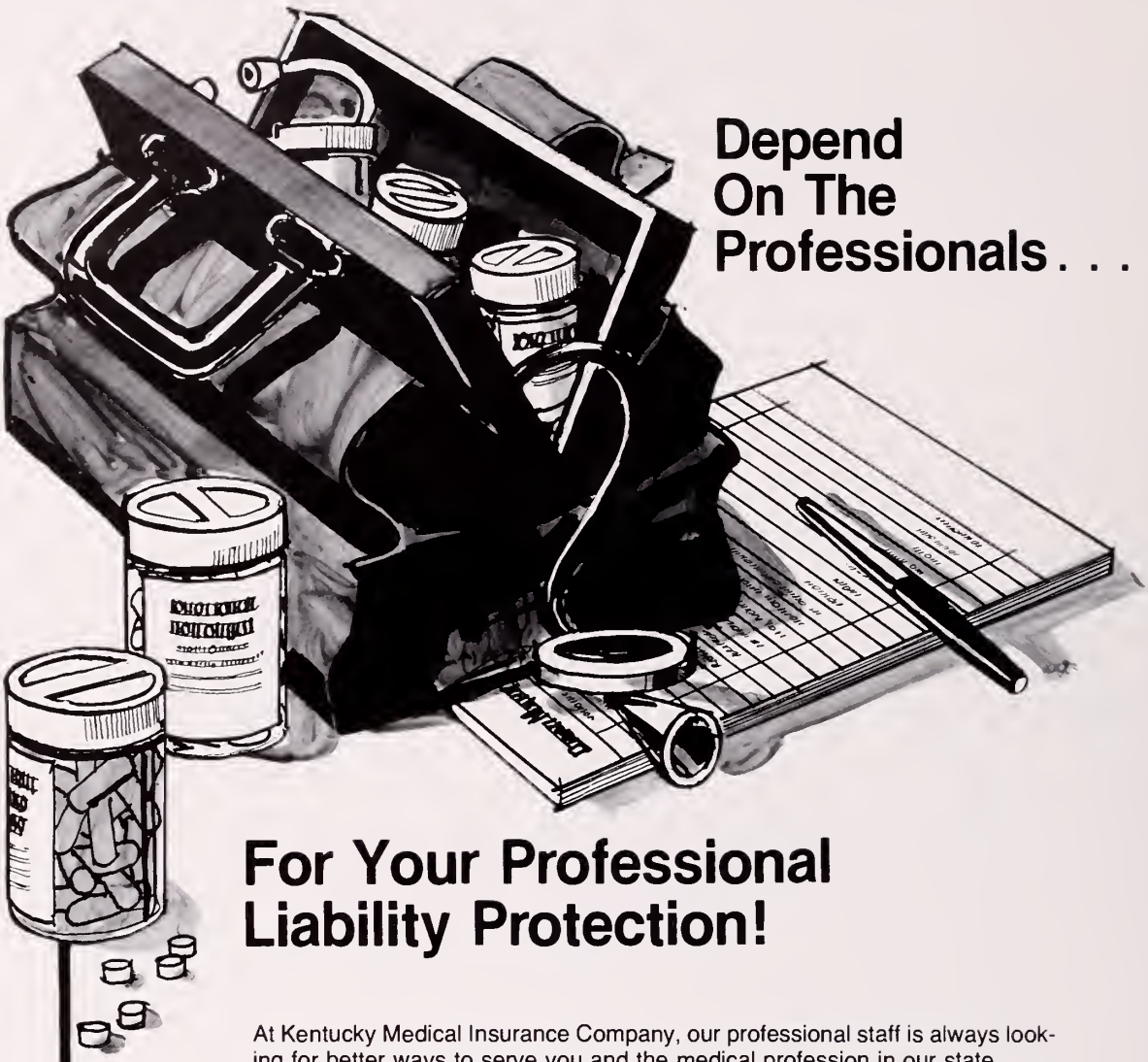

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PRESIDENT'S PAGE

The Kentucky General Assembly will be over when you read this and many hours and weeks of work have been expended by the KMA staff and your officers with the help of many doctors from across the state to seek legislative relief from the malpractice crisis and to defeat legislative activity of many types. Bill Doll and Don Chasteen supported by all of the KMA staff in Louisville are well respected by all in Frankfort and have been extremely responsive in representing your concepts as developed by the KMA House of Delegates and led by the officers and quick action committee. The score card will be hard to evaluate as one cannot equate the value of bills supported and defeated. However, as this is written there are many observations which I have made and would like to share with you.

Optometrists have been legislated by Senate Bill 104 to practice medicine even though many have never been trained to do so and cannot become trained to do what the legislature has passed. In listening to testimony before the different committees of the House and Senate it became evident that decisions were made beforehand and not based on evidence or sound judgement. But the optometrists did their work well. They made the phone calls and contacts. In fact I was told by more than one legislator that no contacts were made by any physician in his district opposing the bill but every optometrist contacted him. Also, I was dumfounded that the teacher-Governor of this commonwealth had no qualms about signing the bill into law.

Other bills which have been introduced as of mid-February have been disposed of by now. What was the outcome which has been reported by the news media including papers, T.V., radio, and especially KET? Do you know what happened to these medically related bills?

SB14 - To require use of seat belts

SB40 - To create a board of examiners in mental health counselor licensure and marriage and family therapy certification.

SB62 - Omnibus Health Care Reform Act of 1986

SB261 - Malpractice Reform Proposals

SB262 - Constitutional Amendment

HB5 - Organ procurement and transplant protocal

HB41 - Licensure of occupational therapists

HB44 - Certification of dieticians

HB138 - Living Will

HB162 - Medical Malpractice Insurance Relief

HB226 - Brain Death

HB333 - Repeal of the Motorcycle Helmet Law

HB500 - Expansion of Medical Licensure Board

HB603 - Physician Assistants Regulations

Let's develop this more and ask you for information on how your state senator and representative voted on the issues listed above and many more bills which were submitted after this page was written. Responsible citizens of this state and also responsible physicians must be aware of legislation and what laws are passed.

Next month is primary month in Kentucky in which 19 of 38 state senators and all 100 representatives will be chosen for the general election in November. You have the burden of deciding who to vote for intelligently, based on your experience with your legislator. If the incumbent in your district was favorable to medicine's point of view then support that legislator by direct campaigning, giving money, and asking KEMPAC to support (if you are a member of KEMPAC). If the incumbent is not running then consider who will best represent your view and give her or him your support or else consider running yourself. There is only one physician in the Kentucky General Assembly, Jack Trevey, M.D., of Lexington.

In love, war, and politics there will be wins and defeats and we can at times only feel vindicated in our efforts if we have presented our position to the best of our abilities.

Wally O. Montgomery, M.D.
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Diabetic Retinopathy

CHARLES C. BARR, M.D.

Diabetic retinopathy is the fourth leading cause of blindness in the United States. The natural history, pathophysiology, clinical recognition and treatment of diabetic retinopathy are reviewed. The rationale for the Sorbinil Retinopathy Trial is discussed.

While diabetes can cause many different ophthalmic disorders, it is diabetic retinopathy that is most often responsible for visual loss. Diabetic retinopathy is one of the four most frequent causes of new blindness in the United States, and the leading cause in the 20-60 year age group.[1] At the present time, about 25% of the diabetic population has some form of diabetic retinopathy, while about 5% have the more severe form of proliferative diabetic retinopathy.[2] Because this entity may be treatable in its early stages, it is imperative that all physicians who are primary care providers to diabetic patients have a basic understanding of diabetic retinopathy and its management.

Although insulin was discovered in 1922, diabetic retinopathy and other vascular complications of diabetes were not a major problem until many years later, because patients in previous years simply did not live long enough to develop them. We now know that the prevalence of all types of diabetic retinopathy is positively correlated with the duration of diabetes. In one epidemiologic study,[3] the prevalence of diabetic retinopathy in insulin dependent diabetics was found to be 7% in patients with diabetes for less than 10 years, but rose to 65% in patients with diabetes for 15 years or more (Fig. 1). Diabetic retinopathy tends to occur sooner in non-insulin dependent diabetics. While the discovery of diabetic retinopathy may occasionally lead to a diagnosis of diabetes, from a practical standpoint, thorough ophthalmic examination is not mandatory until about five years after the onset of insulin dependent diabetes. On the other hand, non-insulin dependent diabetics should have a thorough eye examination at the time the diagnosis is established.

The final metabolic pathway that causes diabetic retinopathy is unknown. At the present time, most investigators believe that retinal capillary closure and the resultant ischemia are responsible for all of the retinal changes of diabetes. Platelet abnormalities, altered erythrocytes, and increased blood viscosity may cause this breakdown of vascular integrity.[4-6] Changes in the relationship between insulin, glucose and growth hormone may also play a role.[7] Capillary basement membrane thickening is noted in experimental diabetic animals; elevated blood glucose and the enzyme aldose reductase may be involved in this process.[8] Swelling of the vascular endothelium, whether from hyperosmotic forces or metabolic changes, probably contributes as well. Whatever the underlying pathophysiology, it is retinal capillary alteration, followed by capillary closure or leakage, that leads to retinal hypoxia and all of the clinically observed changes in diabetic retinopathy.

Although the pathologic changes of diabetic retinopathy form a continuum, most diabetologists and ophthalmologists find it useful to separate background (nonproliferative, intraretinal) retinopathy from proliferative diabetic retinopathy. This classification is useful because the visual prognosis varies with the ophthalmoscopic stage. Patients with simple background diabetic retinopathy usually have good vision and do not need treatment, but they should be observed periodically so that if proliferative disease develops, it does not escape detection.

Microaneurysms are the first clinically detectable change of background diabetic retinopathy.[9] They appear as tiny red dots within the retina, adjacent to the retinal capillaries. They are permeable to water and large molecules, allowing water and lipid to accumulate in the retina. If the wall of a capillary or microaneurysm becomes weakened enough it may rupture, giving rise to an intraretinal blot or flame-shaped hemorrhage. Retinal veins become beaded and tortuous. With more extensive capillary closure, "cotton-wool" spots may be noted; these represent microinfarctions of the retina. Intraretinal microvascular abnormalities (IRMA) are capillary changes more severe than microaneurysms that arise adjacent to an area of capillary closure. The retinal changes of background diabetic retinopathy are not static, but arise and resolve in different retinal locations

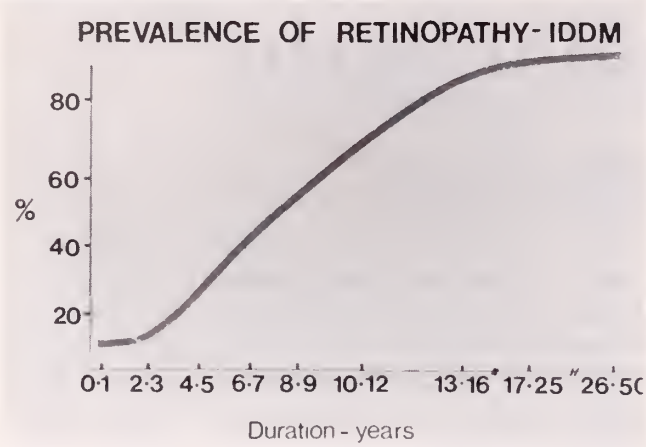

Fig. 1: Prevalence of retinopathy in insulin dependent diabetes mellitus.

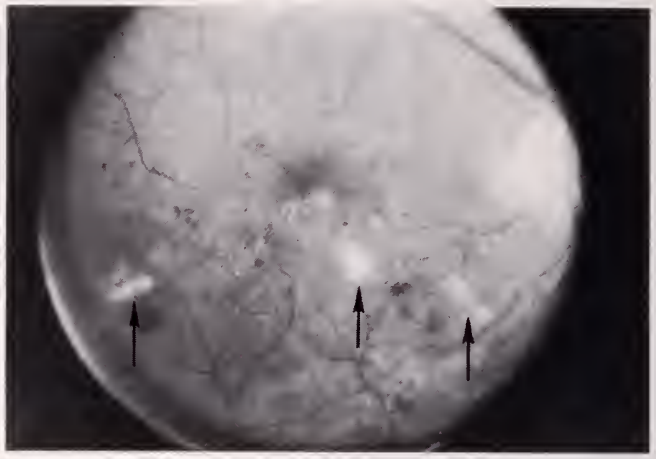

Fig. 2: Moderately severe background diabetic retinopathy. Note multiple intraretinal hemorrhages, cottonwool spots (arrows) and lipid exudate.

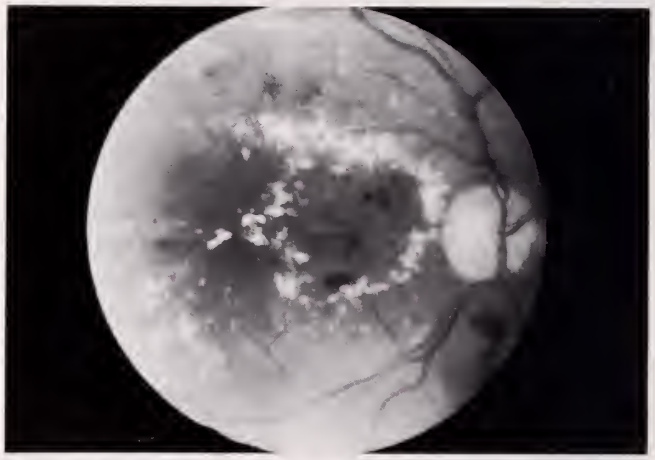

Fig. 3: Moderately severe background diabetic retinopathy. Multiple intraretinal hemorrhages appear black. Intraretinal lipid (hard exudate) forms a "circinate complex" between optic nerve and macula.

over a period of weeks or months. Typical background diabetic retinopathy is illustrated in Fig. 2.

Retinal edema is an important consequence of abnormal retinal capillary fragility and permeability in diabetic retinopathy. Edema involving the macula is the most common cause of decreased vision in diabetic retinopathy.[10] Macular edema may be easily missed with the direct ophthalmoscope; contact lens examination and fluorescein angiography are much more effective ways to establish the diagnosis. Hard exudate rings and deposits are also manifestations of increased capillary permeability and typically appear as yellowish, waxy lesions (Fig. 3). Laser photocoagulation may stabilize diabetic macular edema.[11] This method of treatment is currently being studied in a multicenter controlled clinical trial.

Proliferative diabetic retinopathy is characterized by proliferation of pre-retinal vascular tissue into the vitreous gel overlying the retina. This neovascularization probably occurs in response to relatively extensive retinal hypoxia caused by chronic capillary closure.[12] New blood vessels are usually seen on the surface of the optic nerve or at the junction of perfused and nonperfused retina (Fig. 4). These new vessels do not cause visual loss themselves, and patients are often asymptomatic in the early stages of the disease. However, the new vessels are abnormally fragile, and repeated spontaneous hemorrhages occur. If a hemorrhage infiltrates the vitreous gel over the central retina, vision will be compromised. In the later stages of proliferative diabetic retinopathy, progressive fibrosis of the neovascular tissue can cause retinal detachment.

It is important to be able to recognize proliferative diabetic retinopathy because laser photocoagulation treatment can reduce the rate of severe visual loss in these patients.[13-15] Usually, the peripheral retina is ablated by a technique known as panretinal photocoagulation. The exact mechanism by which photocoagulation works is unknown, but presumably the ischemic retina is destroyed, reducing the stimulus for neovascularization. Pre-existing neovascular tissue will regress with this technique, even though it is not directly treated (Figs. 5 and 6). Although complications such as loss of peripheral visual field and retinal striae can occur, benefits outweigh risks in most cases. Because severe visual loss can be prevented, clinicians who care for diabetic patients must be able to detect proliferative diabetic retinopathy, or be certain that the patient is under the care of an ophthalmologist who can.

Fig. 4: Pre-retinal neovascularization of proliferative diabetic retinopathy (NVE) (arrows). This patient is a candidate for pan-retinal photocoagulation.

Fig. 5: Proliferative diabetic retinopathy. Extensive neovascularization on surface of optic nerve. Splinter hemorrhage is also present.

Fig. 6: Same eye as Fig. 5 three months after pan-retinal photocoagulation. Note regression of neovascular tissue and Argon laser photocoagulation burns nasal to the optic nerve.

Vitrectomy surgery is a relatively new surgical technique which may be useful in certain patients with complications of proliferative diabetic retinopathy, such as persistent vitreous hemorrhage or retinal detachment. During the operation, intraocular blood and neovascular tissue are removed under the operating microscope. This procedure has a technical success rate of 65% in patients with diabetic retinopathy, but only 33% of patients achieve final vision better than 20/200.[16]

It would be worthwhile to prevent the complications of diabetic retinopathy. Current research indicates that aldose reductase may play a major role in the long term complications of diabetes.[8] Aldose reductase is an ubiquitous enzyme that converts a blood sugar in high concentration into its alcohol. In diabetics, intracellular glucose is converted to sorbitol by aldose reductase. Sorbitol cannot diffuse out of cells easily, causing electrolyte imbalance and cell damage. Sorbinil is an investigational drug that may be able to prevent sorbitol accumulation by inhibiting aldose reductase. Laboratory workers have shown that Sorbinil prevents capillary basement membrane thickening in the retinas of diabetic rats.[17] A controlled multicenter clinical trial comparing Sorbinil to placebo is currently under way, and patients are being actively recruited. To be eligible, patients must be between the ages of 18-40, have had diabetes for 3-15 years, and have no diabetic retinopathy. When the study is completed three years from now, we hope to have a new weapon in our armamentarium against diabetes.

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Role of Exercise in Management of Diabetes

J. CYRUS, M.D.

Based on our current knowledge regarding the effects of exercise in fuel metabolism, it seems reasonable to include a regular exercise program as an adjunct to the therapeutic strategy of diabetic patients. This is particularly relevant in the case of well-insulinized and insulin dependent diabetics and insulin independent groups. Regular exercise, however, is not completely free from complications and needs to be kept in mind when prescribing for a diabetic patient. The following is a review of the role of exercise in energy metabolism in normal and diabetic individuals.

Since ancient times, exercise has been considered beneficial in the treatment of diabetes mellitus. Before the discovery of insulin and its role, it had been noted that in certain diabetic patients increased physical activity resulted in deterioration of diabetic state and occasionally diabetic coma.[1] Following introduction of insulin, it became apparent that exercise lowered blood glucose in patients treated adequately with insulin and regular exercise reduced insulin requirement.[2]

In the past decade, owing to a resurgence of public interest in exercise and enhanced understanding of body fuel metabolism during physical training, the role of exercise in management of diabetes has become more well defined. However, many questions are still unanswered and further studies to clarify them are awaited.

In this review we shall describe pertinent developments that have helped in understanding body fuel metabolism during exercise in normal, as well as, diabetic individuals. In addition, we will discuss therapeutic implications of regular physical exercise in diabetic patients.

Exercise in Normal Man

The resting muscle derives virtually all its energy needs by oxidizing fatty acids. Uptake of glucose accounts for less than 10% of the total oxygen consumption by the resting muscle. During early phases of exercise, muscle glycogen provides the major source of energy.[3,4] In contrast, prolonged exercise involves a major multiorgan adjustment that leads to increased supply of fuels and oxygen to the exercising muscle group while maintaining fuel and oxygen supply to the vital organs.

Increase in oxygen demand by the working muscle is met by a proportional increment in cardiac output.[5] To meet its accelerated energy requirements during intense exercise, skeletal muscle utilizes its own glycogen stores as well as triglycerides and free fatty acids from adipose tissue and glucose released by the liver.[6]

Availability of fuel supply (*ie*, the hepatic glucose output and mobilization of free fatty acids from adipose tissue) are glucoregulatory and lipid mobilizing neuroendocrine regulatory processes. The onset of exercise is followed by a sharp and rapid decline of circulating insulin level[7,8] which is due to adrenergic stimulation. This in turn may contribute to the increase in hepatic glucose production and increase in lypolysis as well as the restraining on glucose utilization by nonexercising tissue.

It is important to remember that simultaneous with the decline in insulin levels and in response to decreasing concentrations of glucose in plasma, there is a rise in glucagon levels which plays a major role in maintaining hepatic glucose output.[9,10] Another important hormonal event during an intense exercise is the increase plasma epinephrine which contributes to the maintenance of blood glucose in many ways, by enhancing muscular glycogen breakdown, stimulating lipolysis, and increasing hepatic glycogenolysis.[9] Table 1 summarizes the effects of exercise in normal man.

In conclusion, in normal man the neuroendocrine changes result in a delicate balance between enhanced glucose production by liver and increased muscle utilization.

Exercise in Insulin Dependent Diabetes (Type I)

The glucoregulatory mechanism during exercise in an insulin dependent diabetic patient is dependent on

SUMMARY OF EFFECTS OF EXERCISE IN NORMAL MAN

A. Increased Muscular Glucose Uptake (Permissive)
   1. Insulin has permissive role
   2. Muscular release of "Insulin-like factor" or "Muscle Activity Factor"

B. Increased Consumption of FFA in Mild to Moderate Exercise
   1. Not directly regulated by normal factors
   2. Primarily regulated by rate of delivery (Concentration and Hemodynamic)

C. Increased Hepatic Glucose Production
   1. Increased Glycolysis
   2. Hormone Mediated Gluconeogenesis

Table 1.

the degree of metabolic control and availability of insulin.

It should be remembered that insulin may exert a permissive role on exercise-induced glucose uptake and that insulin sensitivity increases during exercise.[11] In the total absence of insulin glucose, uptake is not enhanced by exercising muscle. Therefore, in diabetics who are moderately well controlled, exercise leads to a decrease in plasma glucose.[12,13] A common clinical problem in these patients is hypoglycemia which may occur during or following exercise. This increased susceptibility to hypoglycemia appears to be due to inability of these patients to decrease their circulating insulin levels during exercise. Indeed exercise may accelerate absorption of insulin from the site of injection.[14] When insulin level is high enough it inhibits the expected increment in hepatic glucose output and as glucose utilization during exercise is increased, hypoglycemia ensues.[13] Therefore, when moderately well or well controlled diabetic patients exercise regularly, their insulin dosage may need to be reduced and/or their caloric intake increased. In addition, a non-exercised area should be used for insulin injection.

In poorly controlled diabetic patients, exercise may actually worsen hyperglycemia and increase ketogenesis. This is commonly observed in patients whose fasting blood glucose is greater than 300 mg/dl and are ketotic prone.[15] An exaggerated counter regulatory hormone response and resultant increased hepatic glucose output, coupled with deficiency in insulin and decreased peripheral tissue glucose on utilization, are the most likely contributing factors. Thus, exercise should be viewed as an adjunct to proper control of blood glucose with insulin and should only be recommended in patients who are adequately well "insulinized" (Table 2).

SUMMARY OF EFFECTS OF EXERCISE IN TYPE I DIABETES

A. Poorly Controlled Diabetics (FBS > 300)
   1. No increased Muscle Uptake of Glucose
   2. Increased Anaerobic Metabolism—Increased Ketone Bodies
   3. Increased Hepatic Glucose Production
      END RESULT Deterioration of Diabetic Control

B. Well Controlled Diabetics (Adequately Insulinized—FBS < 250)
   1. Increased muscle glucose uptake
   2. Hepatic glucose output may not keep pace with glucose consumption—Hypoglycemia

C. REMEMBER Type I Diabetics should be insulinized before exercise is recommended and then hypoglycemia should be avoided

Table 2.

SUMMARY OF EFFECTS OF EXERCISE IN TYPE II DIABETICS

1. Enhanced glucose uptake by muscle contributes to normalization of glycemia
2. Exercise may cause augmentation of tissue sensitivity to insulin (increase in insulin affinity)
3. Clinical Hypoglycemia is rarely a problem

Table 3.

Exercise in Non-Insulin Dependent Diabetic Patients

Beneficial effects of physical exercise in Type II diabetics was demonstrated by Allen et al[16] who showed that during exercise in these patients blood glucose levels fell. These observations have been supported by other studies.[17] Repeated and regular exercise in non-insulin diabetic patients may increase body sensitivity to insulin. This in turn contributes to increased blood glucose utilization by peripheral tissue. In these patients, plasma insulin does not decline during exercise and consequently, an enhancement of muscle glucose uptake occurs, but hepatic glucose output does not rise. Hypoglycemic response to exercise may persist for several hours. Unlike insulin-dependent diabetics, symptomatic hypoglycemia is scarcely a problem in type II diabetics (Table 3).

Practical Considerations:

Patients with diabetic autonomic neuropathy have a reduced maximal tolerable workloads and maximal oxygen consumption.[18] This is due to abnormal metabolic, hormonal and circulatory response to exercise exhibited in diabetic patients suffering from autonomic

neuropathy. Potential problems in these patients during or following exercise may include orthostatic hypotension and severe hypoglycemia without advanced warning. Extreme caution should be used in recommending exercise in these patients. Common factors that may contribute to exercise induced hypoglycemia are beta blockers and alcohol consumption. Both should be avoided, if possible. All diabetic patients who exercise should carry proper identification as well as a readily absorbable concentrated sugar. Any diabetic over age 40 should undergo an exercise stress test to unmask a potentially silent ischemic heart disease before starting an exercise program. Diabetic patients, particularly those who are less well controlled, should be cautioned against dehydration when exercising in warm climate. Patients with sensory neuropathy in feet should be discouraged from exercises which involve repeated traumas to lower extremities (*eg*, jogging, basketball, soccer, etc.). Diabetic individuals who engage in running should wear professionally fitted footwear. And finally, those with proliferative retinopathy should be advised against heavy exercise to prevent hemorrhage.

Summary

On the basis of current information, it seems reasonable to include a regular exercise program as part of the therapeutic program of a well controlled diabetic.

A regular exercise program may improve glycemic control in well-insulinized diabetics and may lower insulin requirement in insulin dependent diabetics. Perhaps a more important role of regular exercise is the improvement of cardiovascular risk factors and prevention and retardation of its complications. These risk factors which are improved by exercise include: hyperinsulinemia and insulin resistance, hyperlipedemia, decreased HDL cholesterol, hypertension, obesity and abnormal catechalamine response to exercise.[19] Physical training in diabetics is not totally innocuous in many patients, particularly in those with autonomic or sensory neuropathy and retinopathy, certain basic precautions are necessary. For a majority of diabetics, however, the benefits of a formal, well-monitored exercise program of graded intensity and under proper supervision far exceed the risks.

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Foot Care in the Diabetic Patient

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A review of factors involved in the pathogenesis of foot problems in diabetics—ischemia, infection and neuropathy—is outlined with guidelines for diagnosis and treatment. Emphasis is placed on prevention including recommendations for proper foot wear and defining the patient's role in daily inspection of the feet. The impact of re-directing the physician's attention to take off the patient's shoes at every visit is clearly demonstrated.

The foot is an essential structure for support and locomotion of the body. It is composed of delicately balanced interacting parts consisting of 26 bones, 46 muscles, multiple supporting structures nourished and innervated by abundant vascular and neural components creating a sound foundation. It is particularly vulnerable and one of the skeletal areas most affected by the complications of diabetes; for example, approximately 20% of all diabetics who enter the hospital are admitted for foot problems.[1]

The pathogenesis of the diabetic foot problems results from an interplay of three factors: ischemia, infection and neuropathy. The major problem in the physician's assessment is to decide which one is playing the most important role in a particular patient, since treatment would be different at different levels of involvement. However, in the majority of cases there is a combination of these factors.

Arterial Insufficiency

Risk factors include smoking, hypercholesterolemia, hypertension, advanced age and duration of diabetes. Abnormal platelets are probably a critical factor in the pathogenesis of vascular disease of the diabetic.[2] The diagnosis is made from the history of intermittent claudication, sometimes progressing to rest pain and cold feet. Healing is slow and this, in turn, lowers local resistance to infection. On examination the skin is shiny and tight, there is loss of hair on the foot and toes, pedal pulses are absent. There is blanching on elevation and rubor on dependence of the foot and the ankle doppler blood pressure is reduced. The ankle systolic pressure index (leg/arm) should be 1.0 or above with good proximal flow.[3] Values of approximately 0.6 are seen with intermittent claudication; and 0.4 with severe rest pain. The normal flow pattern in an artery is triphasic: the major deflexion represents forward flow during systole; the second smaller negative deflexion is caused by reversal of flow at a lower frequency during diastole; and the small third signal represents the return of forward flow. In the presence of occlusive lesions the flow pattern during ultrasound studies is monophasic with a single slow systolic wave most likely representing collateral circulation.[4]

If the vascular aspect is predominant, arteriography is indicated for evaluation of possible revascularization procedure. Any healthy diabetic patient with a foot lesion and no femoral-popliteal pulse should be studied. When there is inadequate blood supply delaying healing, only by improving peripheral arterial circulation will the foot and limb be saved.[5]

Infection

Foot infections are very common in the diabetic patient and frequently are caused by mixed bacterial organisms, aerobic and anaerobic, and by fungi. At any time, up to 40% of diabetics have active superficial dermatophytosis.[6] Fungal infections may lead to cutaneous epithelial breaks and superimposed bacterial cellulitis. Once established, infections may extend to involve the deeper soft tissues, joints or bones. Bacteremia often complicates the more severe foot infections. Clinical features include evidence of cellulitis, discharge and hyperemia around the ulcerated area. Diagnostic studies include culture and sensitivity tests of the open lesion and radiological examination of the affected areas for detection of bone involvement. When systemic signs are present, such as fever, blood cultures are in order. Bed rest and aggressive antibiotic therapy need to be

initiated immediately and modified later based on the culture and sensitivity results if the patient has not improved or if less toxic antibiotics can be used. Chronic lesions with minimal surrounding cellulitis are unlikely to benefit from systemic antibiotic therapy, and the mainstays of treatment are local care and avoidance of trauma. Abscesses are common and require drainage. Normalization of blood glucose is essential for proper leukocyte function such as phagocytosis, chemotaxis and intercellular bactericidal activity.[7]

Neuropathy

This is one of the common complications for which the elderly diabetic person may first seek medical advice. There is strong evidence of relationship between neuropathy and blood glucose control.[8] The metabolic abnormalities involved in the pathogenesis are altered patterns of myelin lipid, accumulation of sorbitol and fructose, and deficiency of myoinositol.[9] It is typically insidious but sudden onset of muscle wasting and weakness may occur relating to times of poor metabolic control.

Many diabetic legs are totally lacking in pain sensation although at the same time, experiencing a variety of painful sensations—the "painful-painless leg." The painful symptoms appear with damage to the small fibers and the painless symptoms syndrome with loss of large myelinated fibers.

Neuropathy affects both somatic and autonomic nerves in the feet. Impairment of pain conduction, tactile and temperature perception is seen with sensory neuropathy. Motor neuropathy causes muscle weakness and atrophy of intrinsic muscles which leaves the pull of the long muscles unopposed. The toes are held dorsiflexed at the metatarsal phalangeal joints with flexion at the interphalangeal joints, in a cocked-up position called "claw toes." This uncovers the metatarsal heads and leads to thinning of normal fat pad. Shifting weight bearing to this small area facilitates ulceration.[10] Proprioception and deep tendon reflexes are typically absent. Autonomic neuropathy disrupts proper sudomotor function resulting in dry and scally skin. Dry keratin is not pliable and tends to crack. Sympathetic dysfunction leads to dilated vascular bed increasing blood flow. This, in turn, opens up A-V shunts resulting in abnormal venous pooling and edema. The result is abnormal blood flow evidenced by engorged veins of the feet. Studies of the venous oxigenation are compatible with the presence of A-V shunts.[11] The fact that epinephrine decreases diabetic edema of the feet further demonstrates the role of sympathetic dysfunction in the development of diabetic edema in uncontrolled individuals.[12] Structural changes in the arterial smooth muscle with consequent calcification (Monckeberg's sclerosis) are seen after sympathetic denervation. In a study of x-ray films of the feet of 1501 diabetics, a 25% incidence of vascular calcifications was noted.[13] This stiffening of the arterial wall further contributes for the abnormal blood flow.

The combination of increased flow and venous pressure leads to abnormal bone cell metabolism and eventual rarefication. Osteolytic lesions including "penciling" of metatarsal shaft are noted on radiographic examination.[14] There is diffuse increased uptake on bone scan. Differentiating from osteomyelitis can be difficult, however, there is usually a focal pattern in the latter. Sequential technetium and gallium scan may be of help. Gallium scan is negative in diabetic osteolysis.[15]

With rarefication the bones are then prone to damage even after minor trauma. Fractures, fragmentations and disarticulations are likely to occur, but because of the impaired pain sensation, the patient continues to walk on the injured foot. The result is a markedly deformed foot with flattened arch, swollen and warm (known as Charcot foot or diabetic osteoarthropathy). New pressure points are created, increasing the chance for ulceration.

The absence of pain sensation and proprioception leaves the joints unprotected from repeated microtrauma. Denervated joints seem able to function for a lifetime unless some episode of trauma or sepsis upsets their normal congruity. After this, repeated minor trauma or even normal use causes progressive disorganization both of the joint surfaces and supporting bones. These changes are common in the lower limbs because the body weight must be imposed on the damaged joint or fractured bones. The association of vigorous activity with loss of pain sensation seems to be the basic requirement for the development of destructive neuropathic lesions.

The development of neuropathy initiates most of the diabetic foot problems. Autonomic neuropathy leads to decreased perspiration, dry skin, tendency for cracks and infection. Sensory neuropathy allows painless trauma; motor neuropathy is manifested through weakness and atrophy of muscles and change in gait creating new pressure points. Increased blood flow will result in osteolytic lesions to bones, fragmentation, deformities and consequently new pressure points.

The insensitive foot of the diabetic is not really very much weaker than a normal foot, it is just more poorly protected because of absent pain reflexes.

A foot may be damaged by external forces in one or more of three ways:

a. Ischemia (in the absence of arterial occlusions) from constant pressure, as from a tight shoe. If it is maintained for many hours, it will cause ischemic necrosis.

b. Mechanical disruption. A much higher pressure may cause direct mechanical damage, as when a foot lands heavily on a sharp stone, broken glass or thumb tack and the skin is broken or penetrated. It takes about 1,000 times more force per unit area to damage skin directly than it does to cause damage by ischemia.[16] Under the foot damage is caused more by narrowing the area of support than by increasing the force. Direct damage from heat and corrosive chemicals belong to this category.

c. Inflammatory autolysis: Constantly repeated moderate pressure at every step, not enough to cause ischemia, may result in inflammation at high pressure points. This is the most common cause of ulceration in the diabetic foot. Similar pressures occur during jogging and brisk walking and do no harm in normal or diabetic feet unless repeated in the same area of the foot many times, day after day, or if tissues are already inflammed as a result of previous trauma. The fact that diabetics do not limp or change their gait in the early stages of traumatic inflammation allows them to go on until they develop a blister or ulceration.

Management of foot ulcers

A penetrating ulcer is not to be treated lightly but as the potential destroyer of the foot. For a new ulcer, bed rest is essential. A few days of rest to the affected part and normal healing will occur. However, in the absence of normal pain threshold most patients continue to walk on a wounded foot. If the opening of the wound is narrow in proportion to its depth, it should be opened and the ulcer debrided. Antibiotic therapy is indicated if significant cellulitis and fever are present. Local care with proteolytic enzymes, topical antibiotics and whirlpool treatment has been suggested.[14] However, the success reported is more likely the result of enthusiastic care, debridement and removal of pressure from the ulcer rather than any specific preparation. When the acute phase has subsided (decreased swelling and pain), the case may be treated by ambulation in a total contact plaster cast.[17] It should only be applied in feet with good blood supply, after infection is localized, with wound wide open. The cast should be removed if systemic signs of infection occur or changed if it becomes loose.

Prevention

Prevention of ulcer formation includes identification of areas at risk for tissue breakdown, such as localized high pressure on the sole. This can be accomplished with the Harris footprint mat which provides differential printing of pressures on the feet.[16] Thirty-five percent of ulcers occur under the metatarsal heads where weight is borne at the conclusion of each step.[18] Molded insoles[19] can redistribute the pressure of weight bearing throughout the whole foot. Because they are made of heat moldable materials that are poor heat conductors, it is possible to mold them directly to the feet.[20] Extra depth shoes sometimes are needed to accommodate the insole. Rigid-soled rocker shoes and metatarsal bars may be necessary for severely scared feet or for feet with a newly healed ulcer where maximum relief of local pressure and prevention of shear stress (caused by bending forefoot during walking) is required.

The dry and scally skin resulting from lack of sudomotor function (autonomic neuropathy) is especially vulnerable to cracks, thus facilitating infection. Rehydration can be accomplished by daily soaking of feet for a short period of time (to avoid maceration) and covering the area with petroleum jelly or lanolin to help retain the moisture in the skin, and therefore increase skin pliability.[21]

Early detection of neuropathy through thermal and tactile threshold measurements will alert the physician and patient and result in early counseling for preventive measures.[22]

If recurrent ulceration becomes a problem, tenotomy of the flexors at the corresponding flexure of the metatarsal-phalangeal joint may be of help in correcting the abnormalities such as "claw toes," thus decreasing pressure under the metatarsal heads.[23] Occasionally removal of the metatarsal heads can also be of benefit.[14]

The indications for amputation include lack of blood supply to that part and recurrent neuropathic ulcerations and infection. The latter should become less frequent as proper foot wear availability improves. Remember that removal of weight bearing tissues will always increase the burden of the tissues that remain. It is important to keep in mind that in-hospital mortality of diabetics undergoing amputation is estimated at about

20%. These patients usually have severe cardiovascular and renal disease. The long range outlook is also poor with the five year survival rate at about 40%. In one or two years 42% will have an amputation of the remaining leg.[24]

Conclusions

The devastating manifestations of neuropathy can only be controlled by constant efforts to avoid wear and tear on the foot. Ulcers do not just happen by themselves suddenly and unannounced. They give warning to those who look for it at a stage when the foot can be saved. Tissue breakdown can be predicted by physical signs of local swelling and heat. The patient should be advised to inspect the feet or have them inspected daily, and look for areas of tissue breakdown, hyperemia, swelling and heat. When areas of increased temperature are noted, rest of the extremity is indicated. Radiographic examination may be necessary to rule out stress fracture. Inspection of the inside of the shoes for foreign objects, nail point and torn lining should be mandatory as well.

Physicians need to emphasize the importance of foot care by taking off the patient's shoes at each visit. A check of the feet should be as routine as blood and urine testing and weight monitoring. Miller reported two-thirds fewer hospital admissions for diabetic foot problems in a group of patients who had foot inspection and foot care education at each clinic visit.[25]

Patients with insensitive feet should understand that their feet will give them a lifetime of gentle pedestrian service, but that running, jumping or walking on rough uneven ground may cut short the useful life of the foot.

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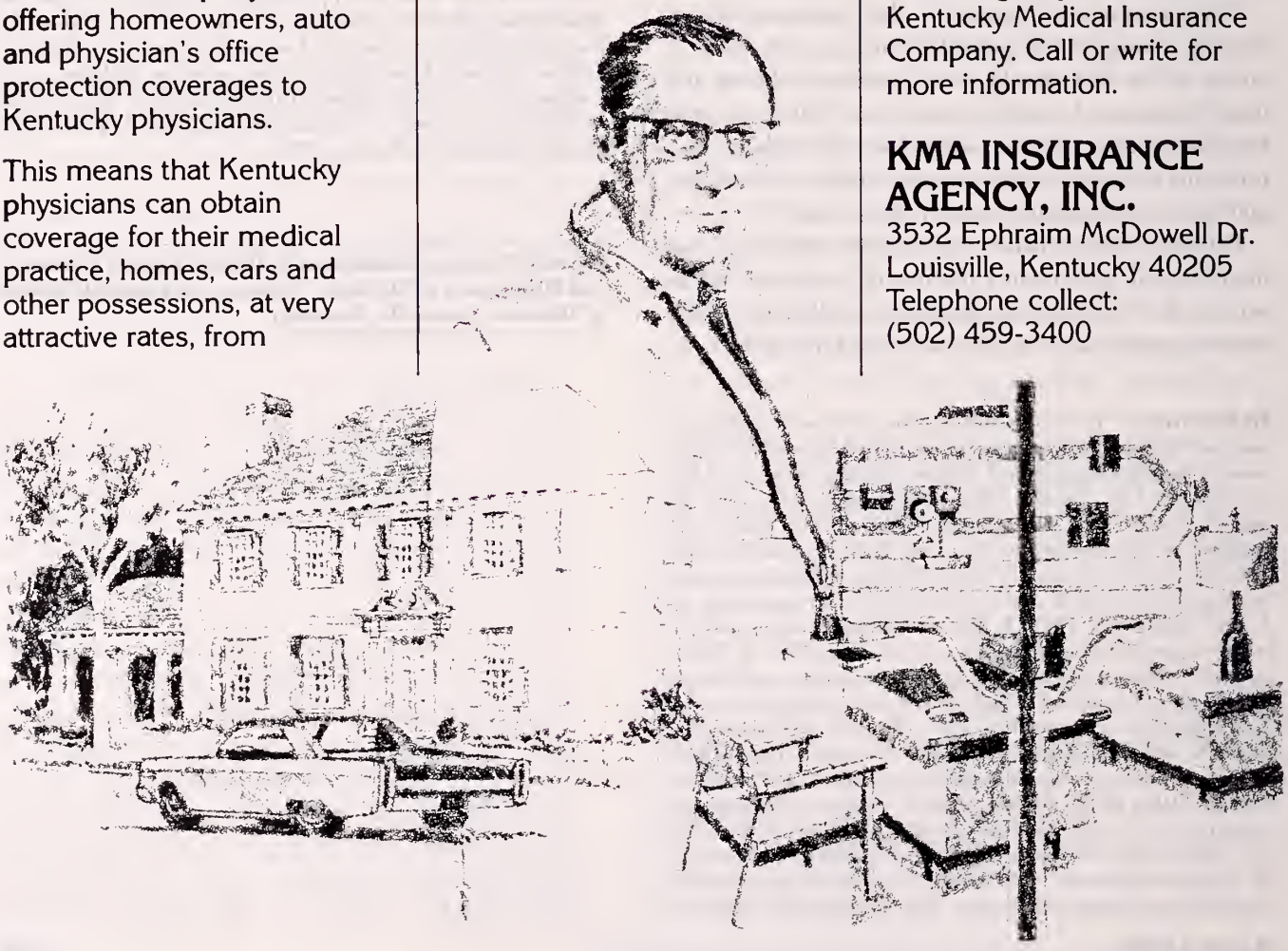

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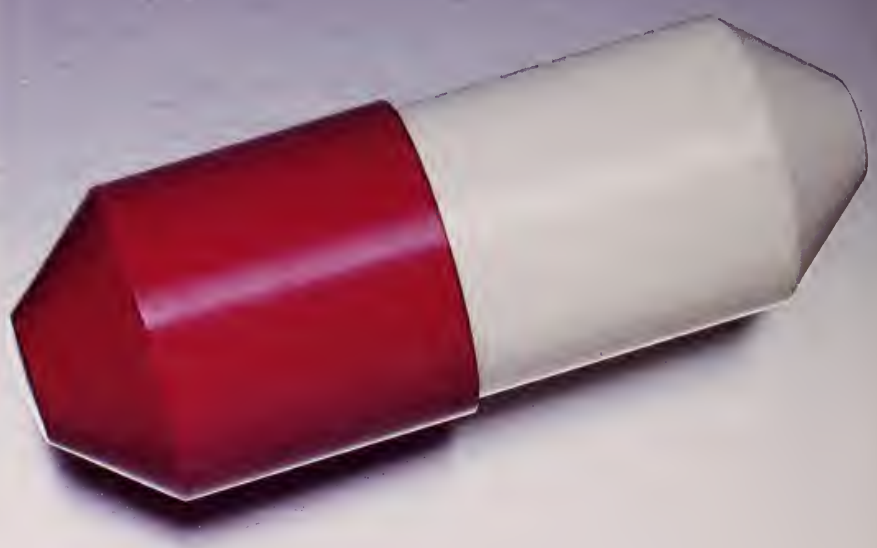

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Cognitive Retraining and Rehabilitation

DENNIS BUCHHOLZ, Ph.D.

In recent years neuropsychological assessment has grown in popularity and has led to the establishment of full neuropsychological services in many hospitals.[1,2] The primary role of these services is usually to provide information about the level and pattern of cognitive functioning for the purpose of clarifying diagnoses.[4] An additional use of the Neuropsychology service, which has been less widely applied, is for treatment through cognitive retraining. Cognitive retraining is well known in rehabilitation settings,[4,5,6,7] but is less familiar to those providing psychiatric care. This type of therapy focuses on the cognitive deficits of patients rather than on their psychiatric symptoms and provides an additional dimension to their overall treatment program. Given the high incidence of neurological disorder seen in psychiatric populations, the usefulness of procedures which could potentially rehabilitate impaired brain function is apparent. This paper illustrates the type of cognitive retraining utilized with psychiatric inpatients and the role of the neuropsychology service in providing this treatment.

The primary approach to dealing with loss of cognitive function in the past has been a direct approach. If a patient was shown to have difficulty in a particular area of ability he would receive treatment in that particular area. For example, someone with a right hemisphere lesion might show difficulty reading maps, finding their way home, or even finding their way around their apartment. The direct approach to treating these patients would involve presenting them with repeated examples of spatial mapping problems. This is simple rote practice in the area of deficit.

In contrast to this approach is cognitive retraining. With cognitive retraining the emphasis is not on the area of deficit but on the areas of strength which can be utilized to compensate for the lost functions. In the example given of right hemisphere injured patients, training is given in the verbal coding of maps. The patients are trained to construct lists of verbal instructions on how to get from place to place: such as "two right turns, one left turn, one right turn" and so on. No specific training is provided on developing spatial skills. The role of the psychologist in this process is to define a patient's pattern of cognitive functions and to suggest a treatment plan. Neuropsychologists, with their thorough understanding of cognitive processes, can be helpful in identifying areas of strength and weakness and in constructing individualized treatment programs.

One aspect of cognitive retraining that is important to note is that it is not for all brain damaged patients. There are a number of prerequisites that must exist before success with this type of therapy can be achieved. First, a thorough neuropsychological examination is necessary to specify areas of strength and weakness. A precise picture of the patient's pattern of cognition is needed. Second, the patient must have relatively good functioning in some areas of cognition. He must have some remaining skills which can be shaped to compensate for his deficits. This means that the patient with gross generalized dysfunction is not a good candidate for treatment. Third, the patient must have sufficient insight and comprehension to recognize that his deficits exist and to understand the reasoning behind the retraining treatment. The patient who is unable to see his impairments or who cannot comprehend the rationale for the retraining cannot benefit from this type of care.

Treatment Procedures

The types of cognitive deficits seen in psychiatric patients vary widely and cover the whole range of possible cognitive dysfunction. Procedures are available to deal with most of these deficits including attentional, gnostic, language, spatial, psychomotor and other types of disabilities. For this discussion I have selected examples of techniques designed for use with generalized attentional deficits and with higher order associative problems. In actual use these procedures emphasize both direct practice and cognitive circumvention to greater or lesser degrees. With more basic functions, such as attention, the focus is on practice while with more complex functions cognitive skills can be stressed. Although it is possible to employ complex equipment to

aid in retraining, the examples presented here use simple, readily available materials.

Attentional/concentrational deficits are frequently seen in our patients, particularly in schizophrenics with histories of drug abuse or other cerebral trauma. Following administration of a neuropsychological battery to establish baseline functioning and to verify areas of deficits, patients are provided with daily therapy sessions which consist of closely supervised training on specific tasks. One task we have employed successfully is the Seashore Rhythm test which consists of pairs of recorded Rhythmic patterns which must be compared and judged for similarity. Good aural attention is required to complete this task.

A second task makes use of a list of numbers spaced out widely on a card. A second, blank card large enough to cover two numbers is moved across the list progressively from left to right. The object of the task is to state the numbers which will be uncovered to the left of the card as it is moved. Task difficulty is increased by increasing the number of digits which are covered by the card.

Other attentional tests which we have found useful are those reported by Craine and Gudeman.[8] These include "Ace to King," and "Repetition from an Auditory Sequence." "Ace to King" makes use of a full suit of playing cards which are shown face up to the patient and then turned over. The task is to remember the location of each card and to turn them face up, again, in proper sequence. "Repetition from an Auditory Sequence," makes use of a list of letters in alphabetical order which are read to the patient out loud. The patient must indicate which letters are missing from the sequence. Task difficulty varies by increasing length of the sequence and by increasing the number of letters omitted. Variety and personal encouragement are added to the treatment sessions to make the process as interesting for patients as possible.

The second main category of treatments to be discussed here are those which have been designed for patients with frontal lobe injuries. Examples of the deficits often seen in such patients include difficulty with verbal organization, abstraction, response inhibition, response sequencing and hypotheses testing. The severity of these deficits can range from the very subtle to the severe. In our inpatient setting, cognitive retraining of these functions has been most helpful for psychotic patients who show these types of cognitive impairments regardless of whether focal brain pathology is identified medically. My limited experience with lobectomized and leucotomized patients in this setting has been that they are too regressed to gain substantial benefit from the therapy.

Patients with verbal organization deficiencies can show intact reading and writing skills but may lack the ability to identify the central points in story material. Such patients can read, but when finished are unable to say what the story they read was about. Cognitive retraining treatment in this type of case involves teaching the patient to look for specific key elements of what he was reading, such as the names of the people involved, the relationships of the people, the setting of the story, and what specific actions took place at particular time intervals. At first it is required that the patient actually write out lists of these various categories. Later he is allowed to present them orally. Importantly, the patient must be able to comprehend that he has difficulty understanding the meaning of what he reads and the purpose of the listing procedure.

A task useful in developing abstraction skills is one that makes use of a box full of objects of varied colors and shapes. In this situation the patient is given a specific instruction to place some subset of the items in the second, empty box. For example, he might be told to "find the red ones" or "find the triangles." When this level of task is mastered, the difficulty can be increased by adding in additional characteristics such as "find all the big red triangles." The most difficult level is one making use of negative statements such as "find all the triangles except the big red ones."

The retraining strategy here is to develop a system of verbal rules which allow the patient to identify the essential characteristics of the objects to be sorted. This kind of process may in fact be similar to what the normal brain does automatically in the classification of objects, but in the brain injured patient this automatic process no longer functions and the patient must be retrained at a conscious level.

Another problem often seen in frontal patients is a loss of ability to stop a sequence of behaviors once they have begun. Treatment in these types of cases emphasizes the use of verbal cues to signal the patient of a change in appropriate response. This is particularly useful in patients who appear to be aware of the proper sequence of behavior, but who are unable to prevent themselves from behaving inappropriately. One exercise is to give the patient a sheet of paper with a random series of two digit numbers on it. The task is to cross out all of the odd numbers and to circle the even numbers. After work is begun the patient is told to shift to

circling the odd numbers and to cross out the even numbers.[8] For some patients the switch is difficult but they can sometimes improve their performance by simply saying outloud "odd" for each trial that they are to circle the odd numbers and "even" when they are to circle the even numbers. This verbalization provides additional cues that are not present in the material.

Some variations on this type of task are having the patient produce the number either before or after the one on the sheet, or giving sheets of pairs of numbers which the patient is instructed to either add or subtract. The underlying principle is the same: the patient must alternate between competing behaviors and is trained in the use of verbal cues to help him keep himself from perseverating.

Sequencing is another area of difficulty sometimes seen in frontal injury patients. They may show severe deficits and be unable to brush their teeth or dress, or, on the other hand, they may show more subtle deficits seen only in the organization of complex tasks such as doing the income tax or performing some task in their profession. A simple type of sequencing task for retraining is a common stylus maze. This kind of problem requires the patient to establish and remember a fixed set of movements in order. Another simple task uses a set of wood blocks which are pointed to in sequence by the therapist. The patient must then repeat the proper sequence. The level of difficulty can be increased to more complex sequences such as used in the game "Boggle." Boggle consists of a set of dice which have letters on them. The dice are assembled in a random pattern of letters and the task is to identify as many words as possible (using their proper sequence of letters) in a fixed interval of time.

In the area of hypothesis testing, a tool we have found to be useful is the game "Mastermind." This game consists of a set of four colored pegs hidden from the view of the patient. The patient must determine the colors and positions of the hidden pegs by trial and error over a series of trials with feedback provided about the correct aspects of his performance. Success at this game requires the ability to form hypotheses about the hidden pegs, to test the hypotheses (and perhaps most importantly) to profit from feedback provided from previous mistakes.

Cognitive retraining in this case utilizes intact verbal abilities to compensate for lost problem solving skills. On each trial the patient is shown where his errors were made, why they were made, and how they could be prevented in the future. Particular emphasis is placed upon failure to make use of feedback when forming new hypotheses. One good aspect about this type of task is that it provides instant reinforcement for correct responses and it can be graded in terms of difficulty by varying the number of pegs and colors used. This allows the treatment to stay within the limits of established operant conditioning principles.

One final step is needed in a cognitive retraining program after a patient gains skills on any specific task. This step is teaching the patient to generalize his newly learned skills to other situations. It is of primary importance that the patient is able to take novel, real life, situations, break them down into their essential components and then to utilize the verbal tools he has gained to help him deal with the problem situation.

Case Reports

Case 1 is a 24-year-old man with a history of closed head trauma in a motorcycle accident. Although his medical recovery was uneventful, he was unable to function at his previous level, lost his job, was divorced, became severely depressed and was hospitalized on a psychiatric unit. Neuropsychological evaluation indicated that he was functioning at a low average level in many areas (such as IQ), but that he had striking deficits in verbal organization, response inhibition, and behavioral sequencing. In addition to receiving chemotherapy and individual psychotherapy, the patient was provided six weeks of daily one hour cognitive retraining sessions directed at these aspects of his cognitive dysfunction.

Behavioral perseveration was a particular problem and this was one of the reasons he lost his job in a furnace assembly plant. He would sometimes repeat a behavior, such as drilling a hole too many times which would result in a ruined furnace. To help him deal with this problem he was given a repetitive task and was then asked to switch his attention to a new, conflicting task. The patient was encouraged to verbalize his actions to provide himself additional cues and to help himself signal a change in the appropriate response.

Another procedure was the outlining and structuring of story paragraphs to help improve his verbal organizational skills. He was initially instructed on how to do written outlines and was then asked to produce them orally. He was also trained in problem solving using the game Mastermind as well as with psychological tests (categories test and Raven Progressive Matrices). Emphasis was placed upon the failure to make use of feedback when forming hypotheses. He was discharged after

six weeks and has been living independently.

Case 2 is an 18-year-old man with a long history of substance abuse including solvent inhalation, barbituate use, and hallucinogen use in particular. No history of traumatic head injury was reported, although he had several previous psychiatric admission with a diagnosis of schizophrenia. Intellectual assessment showed that he was functioning at a low average range (IQ 87) and neuropsychological testing revealed a prominent attention/concentration impairment.

The patient was initially only able to tolerate 15 minute cognitive retraining sessions which were gradually increased to one hour daily sessions over three weeks. Two additional weeks of training were provided beyond this point. Therapy in the sessions focused on attentional deficits with the Ace to King, Spaced Addition, and Repetition from an Auditory Sequence tasks mentioned previously. He was also administered the Stroop Color Naming task which involves rapidly naming the color of ink used to print a series of color names. Difficulty of the task is varied by increasing competing chromatic and semantic information. After a total of eight weeks of hospitalization and treatment with phenothiazines and other therapies, he was transferred to a drug treatment program.

Conclusion

The procedures described here are commonly used in rehabilitation settings and have been shown to be effective with brain damaged patients in that context. They can also be helpful in an inpatient psychiatric setting when used as an adjunct to traditional chemotherapy and psychotherapy. The patients who have responded best are those with neuropsychological test profiles suggestive of brain dysfunction. Procedures are available to deal with attentional, language, memory, spatial, psychomotor and associative skills. With the increased interest in the biological aspects of psychiatric disorders seen in the literature, it may be helpful to give consideration to the use of treatment with this perspective.

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Musings About Medical Education

The time is long past when someone can be designated the completed physician after a four year medical school curriculum. This fact is best appreciated by the recognized need for postgraduate experience. The reasons for the latter are multifactorial, the most obvious being the explosion of medical knowledge and the sophistication of medical practice. Despite these trends, there remains serious gaps in the young medical student's and house officer's training. Subjects devoted to the amplification of humanistic qualities as well as those concerned with the legal, economic and broad social issues of medical practice remain largely ignored.

There is nothing new about criticism of physician education today except perhaps the intensity of the criticism. There have always been responses to these criticisms. Every medical school has its curriculum committee and probably every academic department has its curriculum committee. Elective programs have come and gone; five year curricula have been created; three year programs have been created; there has been verticalization of subject matter—and maybe horizontalization. All of these efforts manifest concern and considerable effort. Still criticism remains.

A word commonly bantered about when discussing medical school curricula is **relevance**. What is **important** in the education of a medical student and physician? There is divergence of opinion about what is relevant, based not necessarily on reality, but on the interests and expertise of the teacher and the various examining boards.

Medical educators glibly speak of core courses and core knowledge. A definition of core knowledge escapes me—as I believe it escapes many people. Every good teacher of medicine—be it the professor in the classroom or the practicing physician with his patient—needs to decide what his audience should know. And this concept implies a sense of priority.

In the presentation of a given topic, some knowledge elements deserve more emphasis than others—priority—and some elements deserve more emphasis in the postgraduate arena than in the undergraduate years—priority. A major need for medical school faculties is to address this issue of priority.

G. Randolph Schrodt, M.D.

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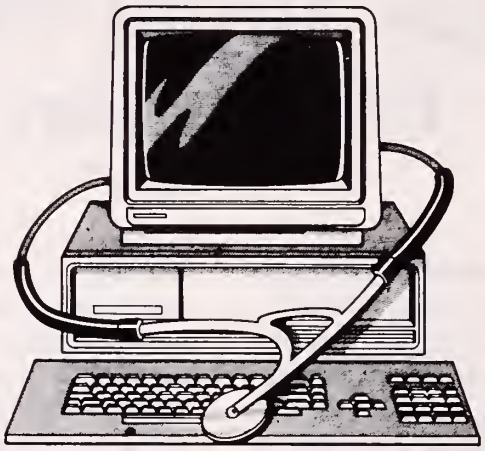

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The Maternal Mortality Committee was presented with the following information:

This 26-year-old, white female, gravida 3, para 3, delivered a 5 lb. ½ oz. female child at term. The patient was followed prenatally by her local medical doctor, prenatal course was marked only by mild elevated blood pressure. The patient presented for delivery with spontaneous rupture of membranes of undetermined length of time with meconium staining. The delivery was essentially unremarkable and it is noted that retained placental parts were checked for and not found. Two days later the patient developed a picture of nausea, vomiting, fever and diarrhea. A positive culture for Enterobacter was obtained, source not specified. The symptoms progressed and the patient was hospitalized and was begun on Keflex, Gentamycin, Aminophylline and steroids. On admission to the hospital she was described as being cyanotic, tachypneic, tachycardic with multiple skin lesions over her trunk and extremities. Her symptoms progressed and she was transferred to a tertiary care center the next day. On admission she was an acutely ill white female with a blood pressure of 70/50, a pulse of 120, a respiratory rate of 34, and blood gases revealing acidosis. No localizing signs were found in the abdomen and the uterus was noted to be 16-18 weeks in size-normal post-partum-and essentially unremarkable. She had multiple skin lesions, appearing to be old purulent lesions, diffusely over her trunk and extremities. She had subconjunctival hemorrhages bilaterally. The admission white blood cell count was 6,700 with 7 segs and 84 bands, a platelet count of 191,000, a PT of 41 control of 31, and a PTT of 16 control of 12. The admission creatinine was 6.3 and the BUN was 44, SGOT was 122, and the amylase was 295. She was seen in consultation with surgery, Ob/Gyn, internal medicine and infectious disease, and all assessments concurred with sepsis, site not specified. In addition, it was felt that she was dehydrated and fluid resuscitation was instituted with good return of blood pressure. The patient developed a progressive picture of respiratory distress, was intubated and placed on a ventilator. That day an exploratory laparotomy was performed to identify the source of sepsis and 2500 cc of purulent material was evacuated from the peritoneal cavity. In the early morning of the day the patient dropped her blood pressure, developed an arrhythmia, developed electrical mechanical dissociation, and expired at 1:25 a.m. It was later learned that her local physician treated her two days before her delivery for an upper respiratory infection. She was treated with Ampicillin. The patient had been hospitalized for two days prior to her delivery for respiratory infection and went home upon her request. An upper respiratory infection occurred approximately one month before the delivery.

Summary and Comment

This patient was a 26-year-old white female, gravida 3, para 3, who expired from the sequelae of group B beta hemolytic streptococcal sepsis. Retrospectively, it would appear that the pathogenic mechanism was endometritis with resulting salpingitis and intraabdominal sepsis. This is supported by the presence of marked endometritis, endometrial necrosis and well organized salpingitis. Group B beta hemolytic strep was grown from vaginal culture, urinary tract culture, uterine swab, and products of conception. The sequelae such as disseminated intravascular coagulation, multifocal ischemic enterocolitis, and anasarca resulted directly from her septicemia.

This case would appear to fit the usual epidemiological pattern for puerperal sepsis. The statistical picture of a woman around 30 years of age with an average parity of 3.6, of whom two-thirds were white and 80% were in the third trimester, and of whom 75% had had premature rupture of membranes, is consistent with this patient's history.[1]

The absence of significant symptoms in the immediate postoperative phase is not unusual, as 56% of these patients have no significant elevation of temperature in the immediate postpartum period. Group B beta hemolytic streptococcus, while not the most common pathogen in puerperal sepsis is not a rare etiological entity, being reported in 8% of isolets in a large retrospective study.[2]

Unlike many other peripartum obstetrical complications, postpartum infection and secondary sepsis has increased in frequency over the last 10 years.[3] The cause of this statistical trend has yet to be determined.

In conclusion, the epidemiological, clinical, and pathological evidence would all support the diagnosis of postpartum sepsis.

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John W. Greene, Jr., M.D.
Chairman, Maternal Mortality Study Committee

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Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category* C: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the Journal. Names will be withheld upon request, but anonymous letters will not be accepted.

Lyme Disease in Kentucky

To The Editor:

In April 1985, a 25-year-old female contracted Lyme disease in Lyon County, Kentucky, following a tick bite. She developed the characteristic expanding red annular lesion (ECM), secondary skin lesions, fever, malaise, fatigue, and monoarticular arthritis. She was prescribed 100 mg Vibramycin twice daily and maintained this regimen until symptoms ameliorated. Lyme disease became a reportable disease in Kentucky on June 4, 1985.

Lyme disease, which results from the bite of an infected tick, has become more common than Rocky Mountain spotted fever in the northeastern United States. More than 500 cases of Lyme disease have been reported annually to the Centers for Disease Control since the early 1980's. In Kentucky, Lyme disease became a reportable disease on June 4, 1985. The disease was named for the town of Old Lyme, Connecticut, where it was first identified in 1975.[1] The causative agent is a tick-transmitted spirochete,[2] *Borrelia burgdorferi*, which by ordinary microscopic examination is indistinguishable from the spirochete which causes syphilis. Lyme disease has occurred mainly in the Northeast, but the incidence appears to be rising and the distribution spreading.[3]

A 25-year-old female contracted Lyme disease in Lyon County, Kentucky, in April 1985. The patient's symptoms were initially misdiagnosed, resulting in delayed treatment and extended convalescence. The female patient presented a textbook example of the clinical symptoms of Lyme disease. She had removed a tick from her abdominal wall, and later noted an expanding annular lesion (Erythema Chronicum Migrans) surrounding the site where she was bitten. This characteristic ECM lesion is considered pathognomonic for Lyme disease.[3] During a two-week period following appearance of the lesion, she developed malaise, fever, persistent fatigue, multiple secondary annular lesions which appeared at various times on her abdomen, thighs, shoulder, and back, and a painful swelling of the right knee. She received various treatments during that interval, including parenteral steroids and a three- to five-day regimen of 500 mg tetracycline. These did little to ameliorate her symptoms, and the young woman sought further medical treatment.

When she presented herself with the above symptoms and described the history of the onset, her ailment was diagnosed as Lyme disease. She was prescribed 100 mg Vibramycin twice daily, and arrangements for lab tests were made. A phone call was made to the Yale Univerity School of Medicine to check all parameters and modalities of therapy regarding this case. The advice given was to maintain the regimen for a longer period than customary, as long as the patient tolerated the treatment and was improving. Without prior treatment, one would have expected IgM antibodies to *Borrelia burgdorferi* to have been elevated. However, immunoglobulin, serum, and anti-nuclear antibody tests were within normal parameters. The patient continued the Vibramycin regimen for 10 weeks. The patient became totally afebrile, swelling of the knee disappeared though some pain remained, anorexia ceased, and only a slight degree of fatigue persisted. Cardiac abnormalities and neurological disorders are potential complications in advanced stages of Lyme disease. While no severe arrhythmia occurred in the patient, a conduction slowing developed, which later improved.

To date, relatively few cases of Lyme disease have been reported in the Southeast. However, tick populations appear to be increasing in many areas. The demand for outdoor recreation is increasing also. As a result, physicians may see an increase in tick-associated problems, particularly during the warm months of the year.

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Golden Pond, KY

Editor's Note

This letter discusses the entity of Lyme's Disease. The patient was not found to have diagnostic antibodies.

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We Are Not Alone: Learning to Live with Chronic Illness

Sefra Kobrin Pitzele

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Rheumatoid arthritis, osteoarthritis, systemic lupus erythematosus, ankylosing spondylitis, Parkinsonism, emphysema, multiple sclerosis, heart disease, stroke with permanent impairment, asthma severe enough to impair, with dystrophies severe enough to impair are the diseases to which the book is mainly dedicated.

Symptoms, diagnosis, physician selection and therapy are discussed with the lay person in mind. Families have to be conformed to a new world of the chronically ill. Personal relationships with spouse, offspring, friends, business partners, *etc.* require both parties to adjust. To the daily living situation the author suggests through directions, illustrations, product suggestions and even cartoons ways to deal with infirmity. Poetry and personal reflection dot the pages and make the book a personal message as well as a primer.

At $14.95 this paperback can be had by many of the afflicted. It would be wise for all of us to read about the chronically ill and to share this work with our patients.

Stephen Z. Smith, M.D.
Assistant Scientific Editor

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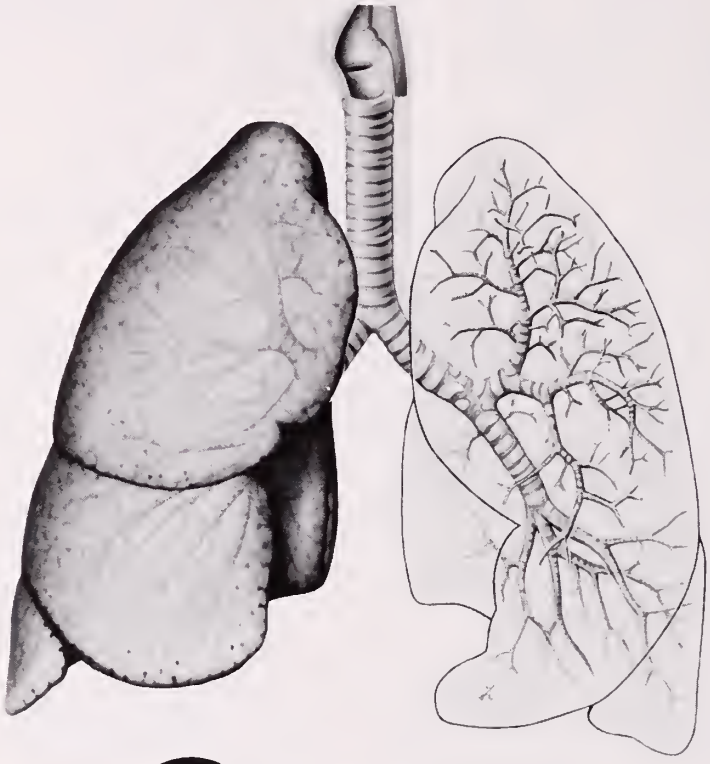

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Brief Summary Consult the package literature for prescribing information

Indications and Usage Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae* and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy particularly to drugs

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics Such colitis may range in severity from mild to life-threatening

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone In moderate to severe cases management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid electrolyte, and protein supplementation When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C difficile* Other causes of colitis should be ruled out

Precautions *General Precautions* — If an allergic reaction to Ceclor* (cefaclor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e g , pressor amines, antihistamines, or corticosteroids

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms Careful observation of the patient is essential If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur This has been observed with Benedict's and Fehling's solutions and also with Clinitest* tablets but not with Tes-Tape* (Glucose Enzymatic Test Strip, USP, Lilly)

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis

Usage in Pregnancy — Pregnancy Category B — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor* (cefaclor, Lilly) There are however, no adequate and well-controlled studies in pregnant women Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed

Nursing Mothers — Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses Average levels were 0 18, 0 20, 0 21, and 0 16 mcg/ml at two, three, four, and five hours respectively Trace amounts were detected at one hour The effect on nursing infants is not known Caution should be exercised when Ceclor is administered to a nursing woman

Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established

Adverse Reactions Adverse effects considered related to therapy with Ceclor are uncommon and are listed below

Gastrointestinal symptoms occur in about 2 5 percent of patients and include diarrhea (1 in 70)

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment Nausea and vomiting have been reported rarely

Hypersensitivity reactions have been reported in about 1 5 percent of patients and include morbiliform eruptions (1 in 100) Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently fever) have been reported These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor Such reactions have been reported more frequently in children than in adults Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy No serious sequelae have been reported Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients)

Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic — Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40)

Hematopoietic — Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200)

[0617B2R]

Note Ceclor* (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever See prescribing information

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A Keeping Pace With Tomorrow M A

Please join us in "Keeping Pace With Tomorrow," by planning to attend The Auxiliary to the Kentucky Medical Association 64th Annual Convention, April 21–23 at the Brown Hotel in Louisville. Convention is time for sharing the accomplishment of our State and County Auxiliaries.

The Auxiliary is honored to have as its guest, President of the American Medical Association Auxiliary, Mary Kay McPhee (William R.) of Kansas City, MO. Mary Kay will address the House of Delegates and Board Members and install the officers for the 1986–87 year.

Another special guest will be Margaret Ann Morgan (Frank E.) of Little Rock, Arkansas. Margaret Ann is President of Southern Medical Association Auxiliary. She will bring greetings from Southern Medical to the House of Delegates.

As an active and bountiful year continues to unfold, the Convention Committee has planned three days of festivities.

Convention 1986

Monday, April 21 EST

10–2:30 pm	Registration
10 am	Finance Meeting
12 pm	Membership Committee Meeting
2 pm	Planning Committee Meeting
3 pm	Health Careers Board Meeting
4 pm	Executive Board Meeting
6 pm	Dinner Honoring Board
7 pm	Board Meeting

Tuesday, April 22

7:30 am	Continental Breakfast
8 am	Registration and Set up Exhibits
9 am	Opening Session, House of Delegates
12 pm	President's Luncheon
1 pm	Auction—Ronald McDonald Houses
2 pm	Afternoon Session of House of Delegates
5 pm	Fayette County Reception Honoring President Elect Phyllis Cronin (John) and 1986–87 Officers

MARY KAY MCPHEE
President AMA Auxiliary

MARY KAY MCPHEE (WILLIAM R.) of Kansas City, Missouri, was installed as President of the AMA Auxiliary at the 1985 Annual Convention in Chicago. Over the past 10 years, she has served as president of both her county and state auxiliaries and at the national level in numerous elected and appointed positions.

Mrs. McPhee's civic activities are varied. Recently, she and Dr. McPhee completed a three-year term on the National Board of Directors of the Association of Couples for Marriage Enrichment. Locally, she has participated as a member of the Board of Directors and president of several major Kansas City organizations. Mrs. McPhee has also served on several statewide task forces.

Among Mrs. McPhee's awards are the Woman of Achievement Award from the Mid-Continent Council of Girl Scouts; the Community Service Award from Women in Communication; a service award from North Kansas City Hospital Auxiliary; and a special citation from the Missouri Volunteers Against Hunger.

A native of Topeka, Kansas, Mrs. McPhee received her B.S. degree in education from the University of Kansas and taught third grade for two years after marrying her husband, William. She and Dr. McPhee, a pathologist, have two children and four grandchildren.

Jo-Ann Daus
President AKMA

7 pm	Dinner Honoring AKMA Past Presidents 1986–86 Officers Installation of Officers Program Mickey Clark, Louisville Artists

Wednesday, April 23

8 am	Breakfast Broadway B
9 am	Post Convention Board Meeting

Reservations and pre-registration information are in the March issue of the Bluegrass News

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Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Transient amnesia or memory impairment has been reported in association with the use of benzodiazepines.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

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DOSAGE: Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.

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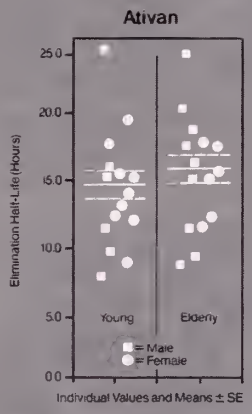
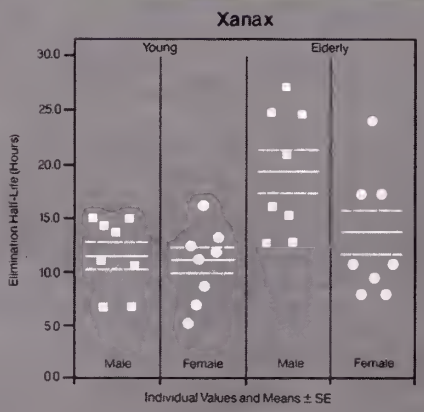
With Ativan, elimination half-life was very similar between young and elderly groups tested; differences did not approach statistical significance.[1]

Comparison of elimination half-lives in young and elderly subjects.



Ativan® (lorazepam)[2]
Ativan®, which is *conjugated* rather than oxidized, shows little difference in half-life (t ½) between young and elderly subjects.



Xanax® (alprazolam)[3] CIV
Xanax® requires *oxidative* (P450) metabolism; significant differences in half-life are shown between young and elderly male subjects; half-life is minimally influenced by age in women.

References:
1. Greenblatt DJ: Clinical study, pharmacokinetics and bioavailability in the elderly, Ativan® (lorazepam). Data on file, Wyeth Laboratories.
2. Greenblatt DJ, Allen MD, Locniskar A, et al: Lorazepam kinetics in the elderly. Clin Pharmacol Ther 26:103, 1979.
3. Greenblatt DJ, Divoll M, Abernethy DR, et al Alprazolam kinetics in the elderly. Arch Gen Psychiatry 40:287, 1983.

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See important information on preceding page.

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Kentucky Medical Association Annual Meeting September 22-25, 1986

SCIENTIFIC SESSIONS

The Ramada Inn East and Convention Center, Louisville, will host the 1986 Annual Meeting. The Scientific Program Committee has invited speakers from across the nation to address this year's theme on "The Aging Patient."

Please make a special note to remember that this year all general scientific sessions will be held during the mornings only of Sept. 23, 24 and 25, with specialty groups meeting during each of those afternoons.

SPECIALTY GROUPS

Programs for 20 specialty groups will be held during the afternoons of Sept. 23, 24 and 25. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be held in the Ramada Inn East & Convention Center.

CME CREDIT

Physicians attending general sessions and specialty group meetings will qualify for 13½ hours of Category I Credit.

KMA HOUSE OF DELEGATES

The opening meeting of the House of Delegates will be held Monday, Sept. 22, at 9 a.m. in the Julia Belle Room of the Convention Center. Reference Committee meetings will begin at 2 p.m. on Monday and the final meeting of the House will begin at 6 p.m., Wednesday, Sept. 24. Officers for the 1986-87 Associational year will be elected during the final House meeting.

PRESIDENT'S LUNCHEON

This year's guest speaker during the President's Luncheon on Wednesday, Sept. 24, is **John J. Coury, Jr., M.D.,** AMA President-Elect. The Luncheon will also include presentations of KMA awards and the installation of the 1986-87 KMA President Richard F. Hench, M.D.

OTHER ACTIVITIES

The Annual **KEMPAC Seminar** will be held Monday, Sept. 22, at the Bluegrass Convention Center. A reception begins at 6 p.m. with dinner at 7 p.m. The **Second Annual McDowell/Crawford Ball** is scheduled during the Annual Meeting. Details will be available soon. **Scientific and Technical Exhibits** will be on display featuring new medical products, services and techniques. Members and guests have an opportunity to visit this area during the 30 minute intermissions scheduled throughout the general sessions and specialty group meetings.

Louisville skyline

Reminder of Program Change

Specialty Group meetings will be held three afternoons during this year's Annual Meeting.

Afternoons of September 23, 24 and 25 will be reserved for specialty groups with General Scientific Session programs scheduled each morning.

Digest of Proceedings KMA Board of Trustees December 4-5, 1985

The KMA Board of Trustees held its second meeting of the Association year at the Headquarters Office on December 4-5, 1985.

Following the Headquarters Office Report, Reports of the KMA President and Auxiliary President, Report of the Senior Delegate to AMA and Secretary of the Board of Medical Licensure, the Board members received reports from the Board Chairmen of KMA Physicians Services, Inc., and KMA Physicians Financial Services, a Federal Credit Union.

The Board of Trustees adopted a position statement developed by the KMA Judicial Council regarding the use and prescription of anabolic steroids to increase athletic performance; endorsed a workers' compensation plan offered by the Dodson Insurance group; and accepted renewal rates for the Blue Cross and Blue Shield Group Plan for KMA members, noting that the low option group experienced a 15% decrease in rates.

At the direction of the House of Delegates, the Board members made several recommendations to the Cabinet for Human Resources on a pamphlet CHR had published on breast cancer treatment; and made recommendations to the Governor for appointments on the Athletic Trainers Advisory Council and the Kentucky Board of Licensure for Nursing Home Administrators.

The Board members then reviewed a handout listing legislative issues of interest to KMA, and another specifically detailing the House of Delegates' directives regarding tort reform. The Board endorsed the Board of Medical Licensure's proposal to amend the Medical Practice Act to allow for certification of physician assistants by the Licensure Board.

It was noted that final registration at the 1985 Annual Meeting was 1,812, and that the theme "The Aging Patient" had been selected for the 1986 Annual Meeting to be held September 21–25 at the Ramada Inn East Convention Center in Louisville.

The date of the next meeting was set for April 9–10, 1986.

Members

Dwight L. Blackburn, M.D., Louisville, has been appointed by the AMA Board of Trustees as Chairman of the Steering Committee of the AMA National Forum for Employed Physicians.

The 11 member Committee will plan the forum to be held in June during the AMA Annual Meeting. It is designed to address the needs and concerns of physicians employed in various practice situations, eg. private practice, group practice and corporate medicine.

Doctor Blackburn, a general practitioner for 28 years and former KMA President, is now a medical consultant for Blue Cross and Blue Shield of Kentucky.

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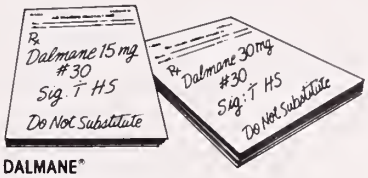
References: 1. Koles J, *et al: Clin Pharmacol Ther 12*:691-697, Jul-Aug 1971. 2. Koles A, *et al: Clin Pharmacal Ther 18*:356-363, Sep 1975. 3. Koles A, *et al: Clin Pharmacal Ther 19*:576-583, May 1976. 4. Koles A, *et al: Clin Pharmacal Ther 32*:781-788, Dec 1982. 5. Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. 6. Dement WC, *et al: Behav Med*, pp. 25-31, Oct 1978. 7. Kales A, Koles JD: *J Clin Psychapharmacol 3*:140-150, Apr 1983. 8. Tennont FS, *et al*: Symposium on the Treotment of Sleep Disorders, Teleconference, Oct 16, 1984. 9. Greenblott DJ, Allen MD, Shoder RI: *Clin Pharmacal Ther 21*:355-361, Mar 1977.



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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Withdrawal symptoms rarely reported; abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, tiredness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase, and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults*: 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients*: 15 mg recommended initially until response is determined.

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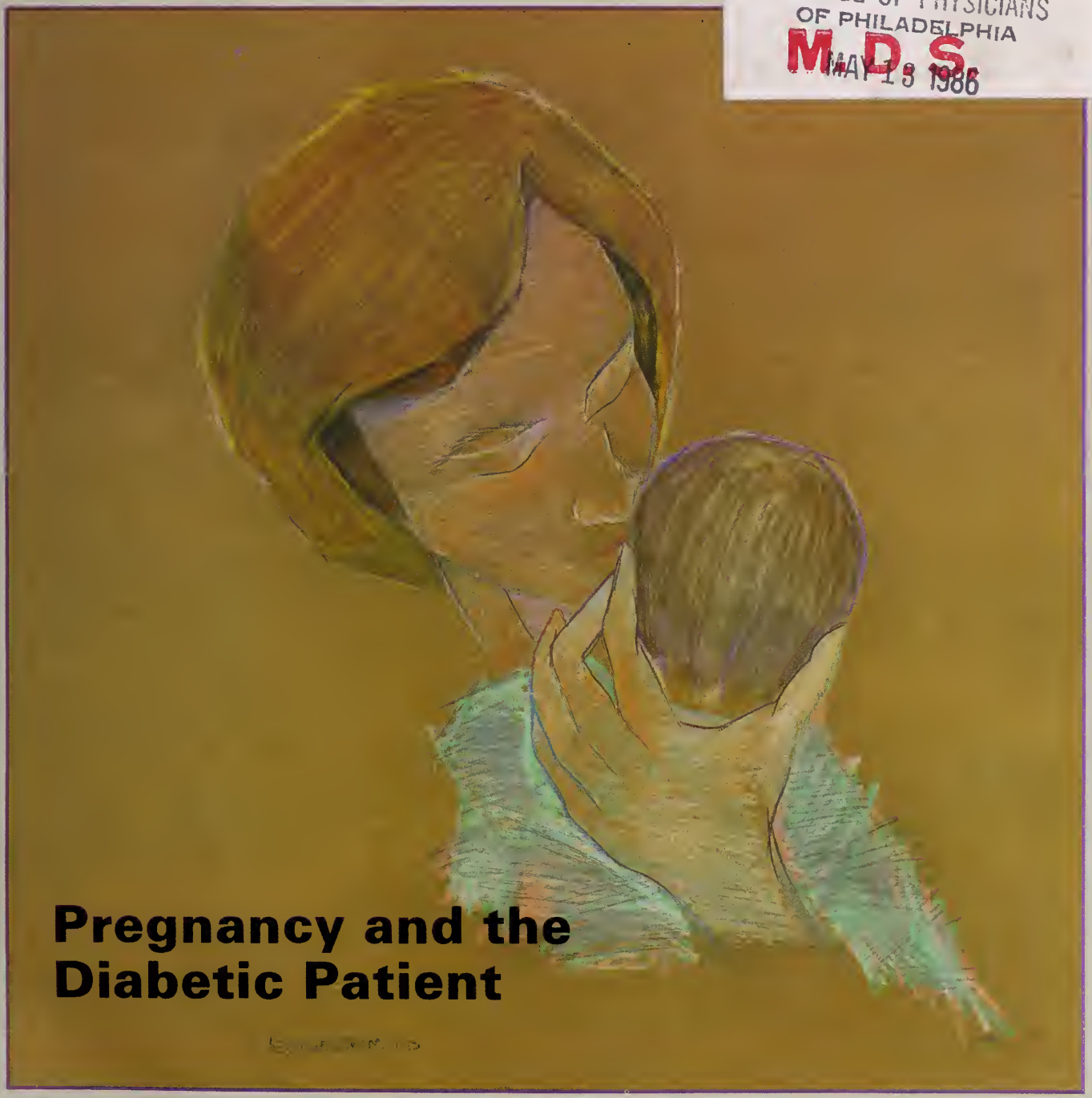

Pregnancy and the Diabetic Patient

Volume 84, Number 5

May 1986

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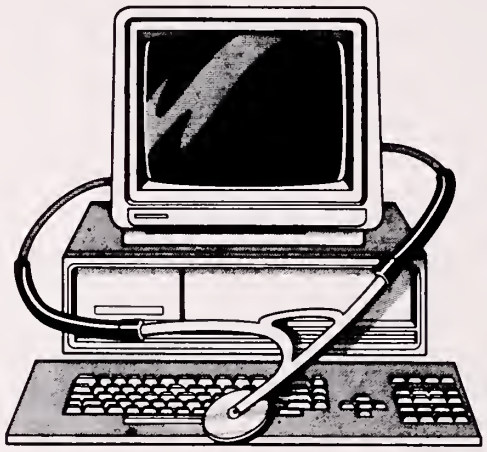

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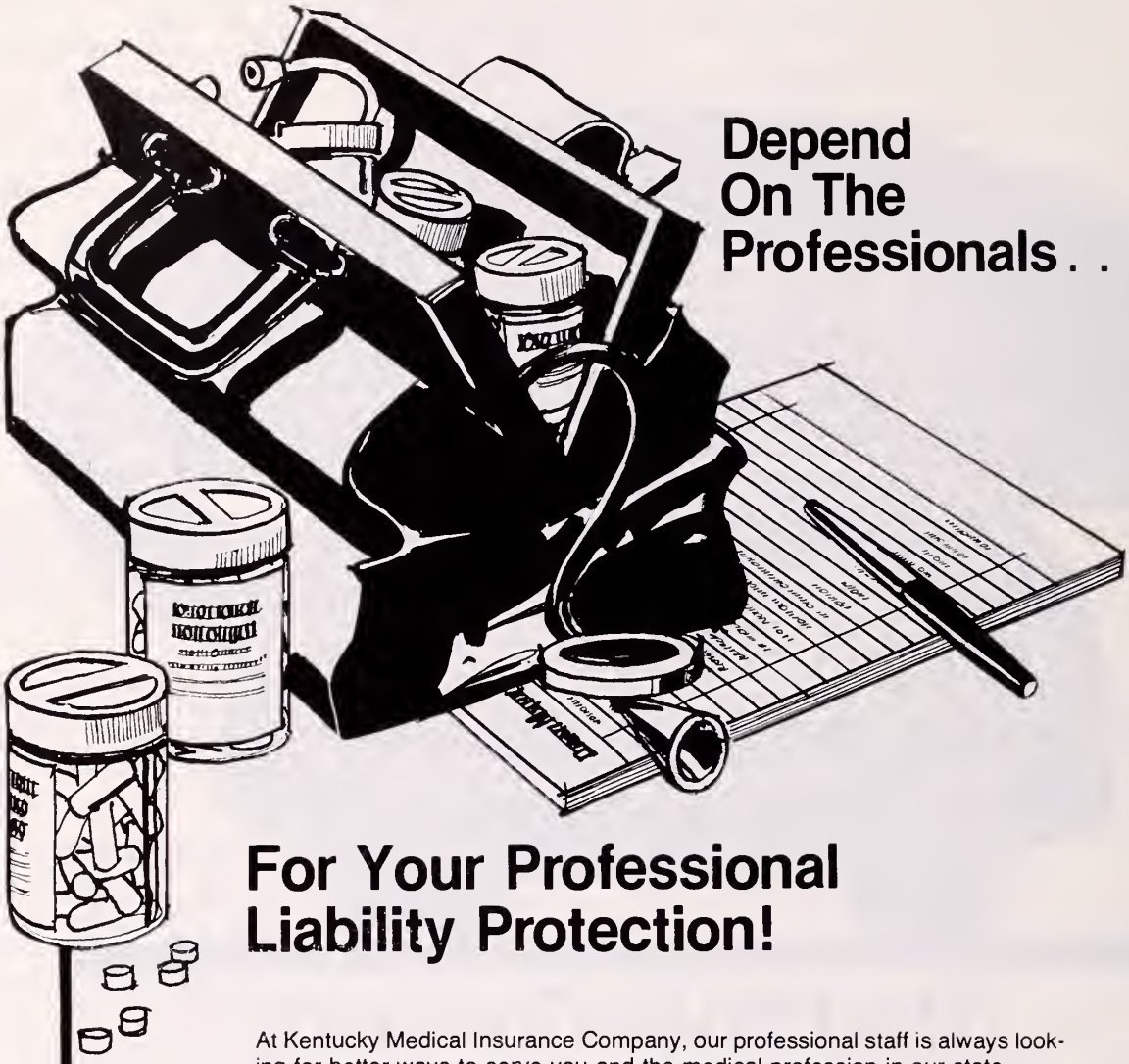

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In 1972, public law 92-603 mandated the development of Professional Standards Review Organizations (PSROs) under the Public Health Service to establish a truly national utilization review program. This program was to be directed by physician organizations which were to apply for grants to develop local criteria for reviewing the care of Medicare and Medicaid patients. At that time we all knew that the primary function of this new law of the land was cost containment.

When the Health Care Financing Administration (HCFA) was given control of PSRO's in 1977, the federal and state governments reemphasized their determination to save money at the expense of Medicare and Medicaid patients. These patients for whom the government had taken responsibility were to be treated differently than third party and private pay patients which caused more displeasure with the program.

The Kentucky Peer Review Organization (KPRO) went into effect in mid-1977 without the blessing of most Kentucky physicians, but with an organizational structure allowing all physicians to be members of KPRO with voting rights to elect a board consisting primarily of physicians. Under this KPRO board, regulations for medical care criteria and retrospective review of medical care developed.

At every meeting of the AMA House of Delegates since 1976, resolutions have been introduced asking that the PSRO program be discontinued and all have been overwhelmingly supported by the delegates. When the Reagan administration proposed phasing out PSRO in 1982 and the elimination of funding for PSRO's, we were hopeful that this burden would soon be over.

But there would be two other public laws which became even more onerous. PL 97-248 - the Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 proposed a prospective pricing system (prospective payment system) which kept PSRO's from being phased out. PL 98-369 - the Deficit Reduction Act in 1983 set up Diagnostic Related Groups (DRG's) for the prospective pricing of hospital reimbursement for 467 diagnoses applicable to Medicare patients. In order to develop such a program, HCFA, a bureaucratic agency, decided to grant contracts to peer review organizations with the purpose of proposing and helping implement administrative and educational changes aimed at improving quality and reducing costs. Another regulation was the Attestation Statement which we all have despised and fought. There is now a bill in Congress to do away with this. These PRO's rapidly developed from the former PSRO's and contracts awarded. In Kentucky the new PRO was essentially the same organization that was started in 1977 and in mid-1984 it was awarded the PRO contract by HCFA.

With new rules and regulations mandated by HCFA there were immediate changes made by KPRO including pre-admission authorization for all non-emergency patients. This requirement has caused consternation to the physicians of Kentucky who admit Medicare and Medicaid patients to hospitals. The two-year contract awarded to KPRO is to expire June 30, 1986, but there is still a requirement that PRO regulations will be made even more rigid. And now all PRO's are being supervised by a "Super-PRO" (System Metrics) in California by a contract from HCFA.

Some other objectives demanded of PRO's:

1. Reduce admissions for procedures that can be performed safely and effectively on an outpatient basis.

2. Reduce "inappropriate" or "unnecessary" admissions or reduce invasive procedures for specific DRGs, practitioners, or hospitals.
3. Reduce "unnecessary" ancillary services (radiology and laboratory).
4. Review elective cases for five of the top 20 Medicare procedure-related DRGs.
5. Review readmissions within 15 days of discharge.
6. Review "appropriateness" of cardiac pacemaker implantation or reimplantation.
7. Record the date and type of pacemaker reimplantations, duration of implantation, and warranty information.
8. Monitor admission patterns.
9. Review "day outliers" and "cost outliers."
10. Validate DRG assignments.
11. Review and monitor cases involving disagreements between hospital representatives and patients regarding necessity for hospitalizations.

And there were quality objectives demanded of peer review organizations:

1. Reduce unnecessary hospital readmissions resulting from "substandard" care during the prior admission.
2. Ensure the provision of medical services without which there is potential for serious complications.
3. Reduce "avoidable" deaths.
4. Reduce "unnecessary" surgery or other invasive procedures.
5. Reduce avoidable postoperative or other complications.

In awarding new contracts incumbent PROs are given the first opportunity to renew their HCFA contract. However, if HCFA decides not to renew, the PRO contract will be put up for bid. Other physical groups, (eg. private peer review entities) as well as fiscal intermediaries will be eligible to compete. The AMA has repeatedly expressed concerns that the initial PRO Scope of Work emphasized cost containment rather than quality assurance. Others criticized the establishment of numerical targets based on flawed data to reduce admissions and adverse outcomes. The new Scope of Work places a greater emphasis on quality issues, increases HCFA's role in targeting specific institutions and potential quality problems, and reduces the level of mandatory reviews.

Although PROs will continue to establish specific targets for reducing admissions and improving quality they will use two different methods to target reviews.

1. HCFA has developed "outlier" lists for individual PROs which identify specific hospitals or DRGs with utilization or mortality rates which are statistically above or below the norm. This data will be made available to the public upon request. In PRO areas where HCFA failed to identify outlier hospitals or DRGs, PROs are expected to target specific physicians or departments within a hospital for review. The AMA and the American Medical Peer Review Association expressed concern that the use of HCFA generated outlier lists will limit PRO flexibility in targeting reviews. PROs are free to use their own analysis to target reviews. However, it remains to be seen to what degree PROs will deviate from the HCFA outlier lists.
2. In addition, PROs will identify quality problems based upon three months of experience with generic screens. The generic quality screens developed by HCFA focus on adverse outcomes such as hospital-acquired infections, premature discharges, and deaths or trauma during hospitalization. These generic screens contain specific yardsticks such as an increase in temperature of more than two degrees more than 72 hours after admission for hospital-acquired infections.

With all this as a background I believe each Kentucky physician faces a meaningful decision. Shall we support KPRO - an organization comprised mainly of Kentucky physicians for the new contract? Or would you rather have an eligible fiscal intermediary? Or how about an out-of-state computer company such as Ross Perot's Electronic Data System of Texas?

Wally O. Montgomery, M.D.
KMA President

***Much of the background data for this article was from a special article by Dans et al., "Peer Review Organizations," New England Journal of Medicine*, Vol. 313, No. 18, pp. 1131–1137, October 31, 1985.**

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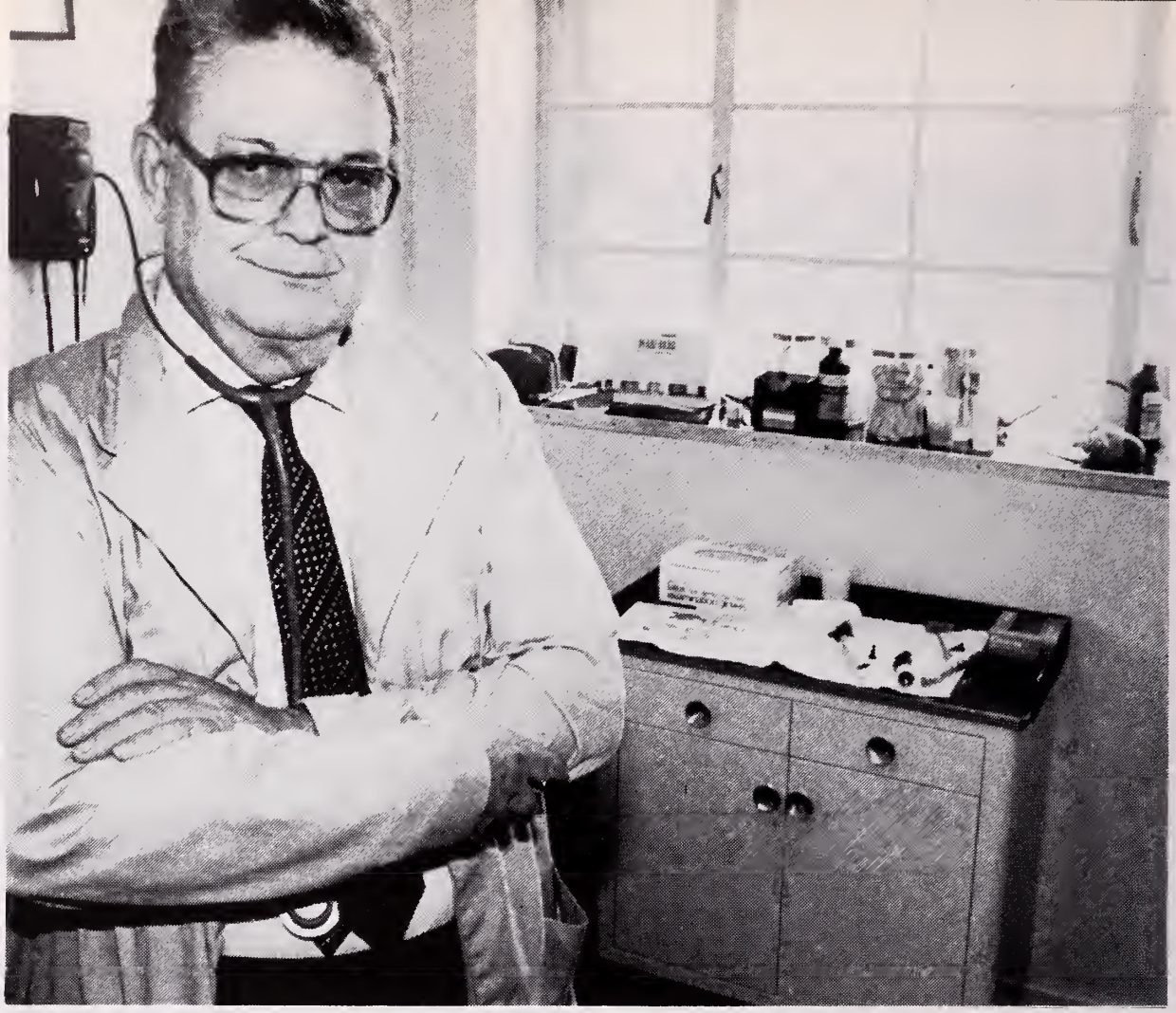

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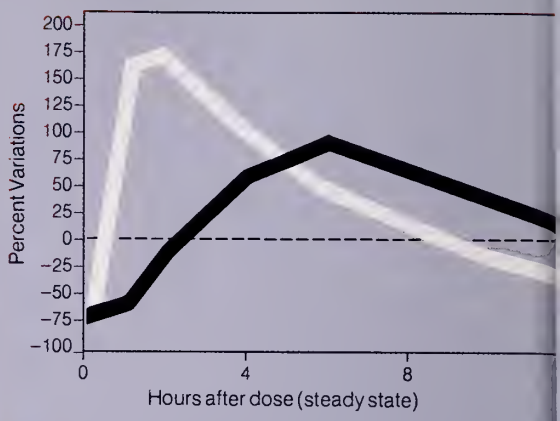

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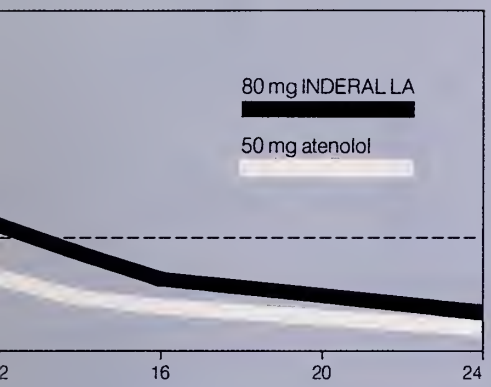

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CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE. Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible)

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS. Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY. The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors

DIABETES AND HYPOGLYCEMIA. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL. Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS. Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY. Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY. Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus

NURSING MOTHERS. Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE. Safety and effectiveness in children have not been established

Hydrochlorothiazide: GENERAL. Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use

PREGNANCY. Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing

PEDIATRIC USE: Safety and effectiveness in children have not been established

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia, congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia, visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss, emotional lability; slightly clouded sensorium, and decreased performance on neuropsychometrics

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis; ischemic colitis.

Allergic: Pharyngitis and agranulocytosis, erythematous rash; fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported

Miscellaneous: Alopecia, LE-like reactions, psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis.

Central Nervous System: Dizziness, vertigo; paresthesias; headache; xanthopsia

Hematologic: Leukopenia; agranulocytosis, thrombocytopenia, aplastic anemia.

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity: Purpura, photosensitivity; rash; urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis); fever, respiratory distress, including pneumonitis; anaphylactic reactions.

Other: Hyperglycemia, glycosuria, hyperuricemia, muscle spasm; weakness; restlessness; transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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Pregnancy and the Diabetic Patient

J. PATRICK LAVERY, M.D., BARBARA RAY PUSEY, L.P.N. AND WILLIAM L. KOONTZ, M.D.

Pregnancy and diabetes is a clinical association which has always been considered a high risk situation by obstetrician and internist alike. Over the last several years there have been dramatic changes in the management of this clinical combination. The successful outcome reported in many series demonstrates the effect of intense effort in surveillance, therapy, and patient education. The following review should acquaint the reader with some of the critical landmarks in the development of improved pregnancy outcome when the pregnancy is influenced by maternal diabetes. Our own experience from the Maternal-Fetal Medicine Division at the University of Louisville is included. The challenge of the 1980s is to exert efforts to improve the morbidity associated with this combination, as well as to reduce in the number of congenital malformations which appear to be related to diabetic control at the time of conception.

Prior to the discovery of insulin in 1922, the coexistence of pregnancy and diabetes was rare. This dramatic therapy initiated a new era: Women with diabetes now reached childbearing years and carried their pregnancies to viability. The perinatal mortality rate, however, for infants of diabetic mothers in the early years of insulin use was extremely high, approaching 40 and 50%. Over the last 60 years, as improved perinatal outcome has been achieved, the expected perinatal mortality for infants of Type I diabetic patients has been reduced to less than 5%.

The landmark paper on diabetes in the obstetrical literature by Karlson and Kjellmer[1] was published in 1972. They showed that the incidence of perinatal deaths in a population whose mean glucose values during the pregnancy was less than 100 mg/dl was 3.8% compared to a 24% perinatal mortality rate in women whose mean blood sugar was greater than 150 mg/dl. Recently, using a similar definition of glucose control Miller *et al*[2] showed the perinatal mortality rate for a well controlled pregnant diabetic population was 2% and for a poorly controlled population it was 27%. Other groups have demonstrated that aggressive management of carbohydrate metabolism during pregnancy is associated with improved perinatal outcome.[3,4,5] The conclusion drawn from these investigations is simply that the more effective the control of diabetes, the more favorable the obstetrical outcome. Indeed, in Roversi's[3] study where the criterion for establishing insulin requirements was the induction of hypoglycemic symptoms to bring the patient to a "maximum tolerated dose," the perinatal mortality rate was only 2.9%. This is barely above the perinatal mortality rate for their general population. No significant adverse effects were associated with the hypoglycemic episodes which occurred in these patients.

Lavin *et al*[6] reviewed published reports since 1977 in 1166 insulin-requiring gravidas and reported a mean perinatal mortality rate of 5.2%. Even in the critical population with diabetic nephropathy outcomes have been very good. Kitzmiller *et al*[7] reported on 26 of these women from the Joslin Clinic with a perinatal survival rate of 89%. The superimposition of hypertension on the diabetic gravida was the most significant portent of bad outcome.

The critical problem thus facing the practitioner involved in the management of the pregnant diabetic is no longer primarily whether the child will survive, but the quality of life of that survivor. There are new areas of challenge to the obstetrical diabetologist in terms of morbidity and malformation.

The primary area of future efforts is to decrease perinatal morbidity for the gravid diabetic and her infant. A reduction in the frequency of pregnancy-induced hypertension, premature labor, ketoacidosis, and a decreasing cesarean section rate is the primary goal. Complications to the infant including the problems of birth trauma, hypoglycemia, hyperbilirubinemia, and

TABLE I

PROTOCOL FOR TYPE I DIABETES-ASSOCIATED PREGNANCY

1) Preconceptual control-normal glucose
2) Early control in first trimester
3) Multiple dose insulin administration — 3-4× daily
4) Home glucose monitoring
5) Ultrasound:
   a) 6-10 weeks for early growth delay
   b) 16 weeks for NTD evaluation and serum αFP
   c) 24-26 weeks for growth
   d) 36-term for size and fetal weight.
6) Fetal movement counts — from 32 weeks
7) Biophysical testing — from 32 weeks (bi weekly testing after 36 weeks)
8) Amniocentesis — 38 weeks — if dates uncertain
9) Delivery — 38 to 40 weeks
10) C-section — macrosomia — > 4000 gm by ultrasound assessment.

NTD = neural tube defect inclusive of all brain and spinal abnormalities. Biophysical testing includes non-stress (NST) and contraction stress (CST) fetal heart rate testing.

TABLE II

MORBIDITY FACTORS IN MANAGEMENT OF INFANTS OF DIABETIC MOTHERS

	Cases	RDS	Jaundice	Hypoglycemia
Gestational DM	45	4%	20%	0%
Gestational — Insulin	36	6%	47%	11%
Type I	60	20%	48%	32%

RDS = Respiratory Distress Syndrome including radiologic changes and need for ventilatory assistance; jaundice means bilirubin-light therapy was required; hypoglycemia indicates need for intravenous therapy. University of Louisville Perenatal Staff Management 1978-1984.

TABLE III

PREGNANCY CASES ASSOCIATED WITH DIABETES, MACROSOMIA, MODE OF DELIVERY AND OUTCOME

	Cases	%LGA	C-S	Prior PMR	Current PMR
Gestational DM.	45	24%	44%	13%	0
Gestational DM-Insulin	36	16%	61%	14%	(1)2.8%
Type I — DM	60	32%	66%	24%	(2)3.3%

LGA = Large for gestational age by criteria of Lubchenco[11]; C-S = Cesarean section; PMR = Perinatal mortality rate. Prior PMR is the Perinatal mortality rate in previous pregnancies where less strict management criteria was employed. University of Louisville Perinatal Staff Management 1978-1984.

respiratory distress are yet to be eliminated. While many of the noted complications appear to be ameliorated by diabetic control during gestation, continued decrease of morbidity will require continued efforts. This morbidity appears to be related in some way to maternal glycemic levels. Sosenko *et al*[8] demonstrated a significant association of neonatal hypoglycemia and macrosomia with elevated umbilical cord C-peptide levels, demonstrating a correlation between these morbidity factors and endogenous fetal insulin levels. Fetal hyperinsulinemia is usually secondary to sustained maternal hyperglycemia. In one obstetrical study of intensely controlled and euglycemic diabetics, Jovanovic *et al*[1] reported no neonatal hypoglycemia, hyperbilirubinemia, respiratory distress or hypocalcemia in a population of 52 insulin-dependent diabetics. Such a remarkable achievement, of course, cannot be expected universally despite intense care, but it establishes a goal toward which all should aim in their pregnancy management.

The second but equally important challenge is related to the problem of congenital malformations. Recently, in a major survey conducted in the United Kingdom, it was found that 26% of all perinatal deaths among diabetic pregnancies were associated with congenital malformations.[9] While congenital anomalies are thought to occur with greater frequency among infants of diabetic mothers, the etiology is unclear.[10] Of particular importance is the increased frequency of neural tube defects, which may be identified early in pregnancy by ultrasonography and serum or amniotic fluid alpha fetoprotein screening. Milunsky reported on 411 pregnant insulin-dependent diabetic women who had an incidence of neural tube defects of 19.5 per thousand while the average population rate does not exceed 2-3/1000.[11] Careful evaluation of the patient during the pregnancy to look for this and other malformations is of critical importance. Recently Miller *et al*[12] and Fuhrmann *et al*[13] have suggested that strict metabolic control initiated prior to pregnancy and reflected by normal glycosolated hemoglobin levels may decrease the frequency of congenital malformations. In the series reported by Fuhrmann intensive preconception control in 128 diabetic women showed a malformation rate of only 0.8% in comparison with 292 other women whose metabolic control was not initiated until the end of the first trimester, and who had a congenital malformation rate of 7.5%.[14]

Using a protocol outlined in Table 1 for insulin-dependent diabetics, members of the perinatal staff at the University of Louisville have been able to achieve satisfying results with intense pregnancy management. This opens a new aspect of care and management. Diabetic control in pregnancy was aimed at achieving euglycemic levels. Efforts were made to maintain home care

and avoid multiple hospitalizations. Intense fetal assessment began in the third trimester, and delivery was generally accomplished prior to term. Table II shows the morbidity factors classically associated with diabetic infants namely respiratory distress, jaundice and hypoglycemia and their respective incidence in the population studied. Table III shows data regarding outcome derived from 1978 to 1984 in managing diabetic gravidas with the philosophy of active glucose control by the University of Louisville staff. The two losses in the Type I group were secondary to congenital malformations not compatible with life. The other death was the result of a postmortem cesarean performed on a mother who had died secondary to congestive heart failure. This is a corrected PMR of 0% for diabetes associated conditions among diabetic gravidas. The comparatively high frequency of large for gestational age infants, defined as two standard deviations above the Lubchenko Colorado growth curve,[15] and the high cesarean rate form the challenges of the 1980's for the obstetrical diabetologist. During this time the increase in insulin consumption was 106% over prepregnancy levels among the Type I gravid diabetics. With more intense prepregnancy counseling the authors believe that an improvement in both morbidity and malformation rates can be achieved. Recently extremely successful results have been achieved by employing home glucose monitoring. This has minimized the hospital stay for the gravid diabetic.

Conclusion

The combination of diabetes and pregnancy need not pose the fearful spectre of adverse obstetric outcome and significant maternal morbidity. With intense efforts at preconceptional control and intrapartum management, classic problems associated with diabetes may be significantly modified if not eliminated. The combination of intense prepregnancy counseling and control combined with good antepartum control and thorough fetal assessment in the third trimester, should be able to achieve pregnancy outcomes nearly comparable to the obstetrical population as a whole in terms of mortality and morbidity. The goals of management in the 1980's are to extend pregnancies closer to term, decrease cesarean section rates, decrease the frequency of congenital malformations, and deliver healthy infants with minimal morbidity.

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Diabetes in Adolescence

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Insulin dependent diabetes in the young person complicates the process of adjustment to adolescence; in addition, the physical and psychological changes associated with adolescence are a destabilizing influence on diabetes. A clear understanding of both diabetes and adolescence and the impact of each on the other is essential to the proper management of the adolescent with diabetes mellitus.

Adolescence is a complex process of rapid growth and maturation in which the young person is challenged to increasingly assume adult roles and responsibilities. Under the best of circumstances, it is a potentially stressful time for adolescents and their families.

The superimposition of the demands of a diabetes regimen on the strains of adolescent adjustment can be disastrous for metabolic balance and for normal adolescent growth and development unless a knowledgeable and intelligent approach is taken by the patient, the parents and involved health professionals.

The physical and psychological changes of puberty have a profound influence on insulin and nutritional requirements of young diabetics and on the attitudes with which they approach the diabetic regimen. On the other hand, the altered metabolic state and the restricted environment attendant on the diabetic state may significantly alter the process of physical and psychological maturation. Family dynamics and sociocultural adolescent lifestyles add additional variables to the complex process of physical and psychological interactions.

While a unidirectional analysis of complex interactions may produce oversimplifications, it is helpful to consider the effects of diabetes on growth and maturation and the effects of growth and maturation on diabetes independently.

Impact of Diabetes on Physical Growth and Maturation

Poor control of diabetes presenting in the young child may produce severe degrees of growth retardation and maturation delay with late onset of puberty.[1] Diabetes of later onset may result in more subtle evidence of maturation delay. However, the onset of diabetes close to the anticipated time of menarche is associated with a significant delay of menses in girls with diabetes.[2,3] Onset of diabetes in the post-pubertal adolescent has little effect on maturation but poor control may be associated with menstrual irregularities and relative infertility in girls.

Impact on Psychological Maturation

The child with long-standing diabetes entering puberty may be advantaged or handicapped emotionally, depending on how diabetes has been managed in childhood.[4] Emotional immaturity will generally accompany physical immaturity and may be compounded by a blighted sense of autonomy resulting from parental overprotection and overcontrol of the child and his environment by parents and health professionals. Diabetes does, however, offer an opportunity for a young person to develop industry and a sense of responsibility if the right approach is taken, but development of those qualities may be suppressed if the child is not allowed to actively participate in his own care.

The development of diabetes early in adolescence presents the greatest problem for the patient, the parents and the physician. Neither the adolescent nor the parents are prepared for the added burden of diabetes on adjustment to adolescence. The entire process of denial, grief and acceptance has to be worked through at a time when the young person is striving to develop independence, peer acceptance and self-esteem.[5,6] Feelings of imperfection may distort an already fragile body image and impair ego development. Onset of diabetes in late adolescence may raise concerns relating to productivity and reproduction and may produce some regression in psychological development. However, the impact of diabetes is generally less damaging psychologically at this stage.

Maturation delay from any cause tends to be more detrimental to adolescent adjustment in boys where leadership and peer acceptance are positively corre-

lated with level of maturity.[7] "Popularity" in adolescent girls is less dependent on level of maturation.

Physical Maturation

A natural increase in insulin requirements occurs with puberty related to increased body mass and increased level of caloric intake required for pubertal growth. Increasing insulin requirements tend to reduce the significance of any remaining endogenous insulin production and a second injection of insulin, if not already instituted, may become an absolute necessity at this time. It is not clear if hormonal changes at puberty destabilize diabetes directly, but certainly the emotional lability often associated with adolescence provides a basis for variable catecholamine release and glycemic instability.

The changing nutritional requirements in themselves are a destabilizing influence. If nutritional assignments do not keep pace with requirements, irregular supplementation of the diet by the patient frequently occurs, often with concentrated carbohydrates which are favored by the adolescent. Irregular exercise is a common phenomenon of adolescence which creates additional problems for the diabetic. Segregation according to body build and maturation level occurs at adolescence which tends to exclude many from organized sports and subjects the chosen few to strenuous and often irregular and ill-timed exertion in competitive athletics.

Impact of Psychological Maturation

The characteristic adolescent need for evolving independence from adults does not necessarily militate against compliance, but frequently heightens resentment of parents' close supervision and nagging with respect to the daily diabetic regimen. The need for peer group acceptance may lead to concealment of perceived "imperfections" and neglect of aspects of the diabetic regimen which brand the diabetic as "different." The development of close and intimate personal relationships may have a positive or negative influence on compliance but often serves to weaken the influence of authority figures such as parents and members of the medical team.

Impact of Adolescent Lifestyles

Older adolescents are characteristically trying to combine school, a part-time job, some degree of athletic participation and a variety of social activities. Being in a consistent place at a consistent time for meals and for the evening insulin injection can be a major logistical problem for the teen-ager. If a diabetic has not demonstrated a responsible approach to attending to dietary and insulin needs, a great deal of conflict over parental permission to work or participate in outside activities can arise.

Adolescents' concern with weight and their frequent resorting to fad diets may adversely affect dietary compliance of diabetic teenagers. Some may resort to decreasing insulin in order to avoid weight gain and weight control may take precedence over diabetes control.

The unpredictable glycemic effects of various forms of alcoholic beverages may complicate diabetic control in the indulgent diabetic and even mild states of intoxication may lead to confusion with hypoglycemia and a failure of symptoms to be recognized. Cigarette smoking while producing no short term effects potentiates the vascular complications of diabetes.

Experimentation with mood altering drugs will produce varying effects on blood sugar and contribute to metabolic instability in the diabetic.

Mitigating the Adverse Interactions

Onset of diabetes in the preadolescent child allows the parents and medical staff time to facilitate the child's adjustment to the diabetic regimen and to prepare the child for the destabilizing influences of adolescence. A maximal effort should be made to sustain normal growth and development through maintaining optimal metabolic control. Positive influences on psychological development can be established through involving the child in discussions and decision making as early as the child seems interested. The child can be made to feel important rather than the passive object of adult concern. Some responsibility for testing and recording can be assigned at an early age (four to six years) and appropriate rewards for performance can generate pride of accomplishment in the young child. Insulin injection can be performed by the six to 10-year-old child with a feeling of confidence and a sense of responsibility. Ten year olds can acquire a significant understanding of diabetes and understand and execute simple rules for insulin adjustment. Managing diabetes under supervision can be a confidence-building experience for the preadolescent generating self-esteem that will carry through adolescence.

The preadolescent who has the opportunity to demonstrate responsibility gains the confidence and trust of parents which allows smooth development of indepen-

dence in adolescence. Where parental overprotection is apparent, separation from parents through attendance at Diabetic Camp is a useful adjunct in encouraging the child's feeling of independence. Discussions with the preadolescent of the changes to be anticipated at adolescence and concerning the impact of adolescent lifestyles on diabetes can favorably influence the child's attitudes and adjustments in adolescence.

Once the diabetic of long standing enters adolescence, it is important to build on the feeling of responsibility and emerging independence engendered in the preadolescent. To the adolescent anxious to do his "own thing," responsible self-management of diabetes provides an excellent mechanism for demonstrating maturity and the ability to assume responsibility for his or her own welfare. The optimal degree of parental supervision will vary from family to family but a feeling of trust and pride on the part of the parents, when appropriate, provides a great boost in self-esteem for the diabetic adolescent. Even for those adolescents who cannot seem to act responsibly enough to generate the ideal relationship, encouragement to stay one step ahead of their parents decreases the opportunity for nagging and conflict which so often works to the detriment of both the diabetic regimen and psychological maturation of the adolescent.

The development of diabetes in early adolescence is not only especially stressful for the patient and parents, it is often very difficult for the physician who, if a diabetes specialist or an internist, is usually a stranger to the patient. While psychological counseling may be indicated in many other situations of diabetes in childhood it is particularly important in adolescent onset diabetes.

In order for the adolescent to cope with the abrupt interruption of the adolescent's course toward independence, an intensive educational program is necessary to allow rapid mastery of self-management and restoration of confidence in the ability to function independently. It is important to educate the parents, as well, to relieve their anxieties and fear of the unknown, but the adolescent must establish an independent relationship with the physician and other health professionals to reinforce a sense of emerging adulthood and to avoid regression to the status of a dependent child.

Health professionals should gain approval of the adolescent to engage visiting friends in discussions about diabetes so that their misconceptions do not damage peer relations of the patient. It is also prudent to encourage candor relative to diabetes between the adolescent and friends so that secrecy and deception concerning the diabetes regimen do not undermine peer relationships.

The newly diagnosed diabetic adolescent needs reassurance concerning academic and athletic capabilities. Success stories of famous diabetics[8] are helpful in this regard as well as statistics relative to academic and socioeconomic achievement of diabetics as a group. With family support and positive interaction with health professionals, self-esteem can be preserved and enhanced.

Conclusion

The stereotype of the adolescent diabetic, rebellious, non-compliant and poorly controlled, if accepted, becomes a self-fulfilling prophecy. Through an in-depth understanding of diabetes and adolescence, and their mutual interactions, an approach can be taken which promotes normal physical and psychological development and maintains adequate metabolic control.

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Hypoglycemia In Insulin-Dependent Diabetes Mellitus

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The objective evidence, coupled with hope and belief, that near normalization of glycemia may prevent or diminish the development of long term complications of diabetes mellitus, has led to the use of intensive insulin therapy regimens in patients with IDDM. However, because most patients with IDDM have impaired glucose counterregulation, there is a risk that unwise or excessive intensive therapy might provoke severe hypoglycemia in some patients. Safe and reproducible tests have recently been proposed to identify patients who are at risk. Newer techniques for measuring counterregulatory hormones suggest that post-hypoglycemia hyperglycemia (The "Somogyi phenomenon") is primarily due to a relative deficiency of free insulin rather than, as had been hypothesized, a response to antagonist hormones. "Silent" nocturnal hypoglycemia is relatively common in IDDM, and needs blood sampling, particularly around 3 a.m., for its recognition. The dawn phenomenon is an increase in early morning fasting blood glucose, and insulin requirements, observed in IDDM patients. This dawn effect is probably an exaggeration of the circadian physiologic variation in insulin sensitivity, and its inappropriate overtreatment may result in severe hypoglycemia.

The introduction of the concept of 24-hour intensified blood glucose control has required a re-evaluation of the danger and prevalence of (exogenous) insulin-induced hypoglycemia in insulin-dependent diabetes mellitus (IDDM). In February 1982, the CDC convened a group of diabetes researchers, diabetes specialists and representatives of the National Diabetes Advisory Board, the CDC and the NIH, to discuss 13 deaths of diabetic patients receiving continuous subcutaneous insulin therapy via external insulin pump.[1] In April 1982, the death toll reached 21 patients,[1] and in Sept. 1983, 45 patients using external subcutaneous pumps in the United States,[2] had died. Although proper data for comparison are conspiciously scarce, it has been concluded that these deaths do not represent excessive mortality, as the overall mortality is not higher than one would expect from comparable conventionally treated diabetes.[1,2]

In a perceptive analysis of the earlier series of deaths, Unger[1] concluded that hypoglycemia may well have caused death in six (four of whom were aged under 30 years) of the 12 cases investigated. As neither undue insulin sensitivity nor overdose appeared to be a problem, Unger proposed that there is probably an underlying prediliction for hypoglycemia and vulnerability to its consequences in meticulously controlled Type I diabetes. The purpose of this brief view is to examine, 1) The evidence for an underlying prediliction for hypoglycemia in the light of newer data about impaired glucose counter-regulation in diabetes (also known as counter-regulatory failure), 2) Revised or new concepts of the "Somogyi Phenomenon," of asymptomatic nocturnal hypoglycemia, and of the "dawn phenomenon," all being relevant to the management of Type I patients by intensive therapy, whether by pump or by multiple injections, 3) Tests to identify Type I patients who might be at an increased risk of severe hypoglycemia during intensive therapy.

Glucose Counterregulation

Hypoglycemia has been defined, on statistical grounds, as a blood glucose level below 40 mg/dl (plasma glucose 45 mg/dl).[3] There is indeed a glycemic threshold near 40 mg/dl for electroencephalographic changes during gradual lowering of blood glucose in Type I diabetic patients.[4] Under normal circumstances glucose is the major fuel for brain metabolism, except when blood ketones rise, as in starvation or prolonged exercise, when 3-hydroxybutyrate and acetoacetate may substitute for glucose energy-yielding substrates in the brain. The combination of hypoglycemia and ketosis is, of course, very unusual in Type I diabetes.

In non-diabetic humans there is, in response to insulin-induced hypoglycemia, a characteristic rapid glu-

cagon and catecholamine rise, followed by increases in growth hormone and cortisol.[5,6,7] In a series of elegant experiments, Cryer[5] has demonstrated in non-diabetic subjects that glucagon played the primary role in recovery from insulin-induced hypoglycemia. Induced glucagon deficiency was compensated for by enhanced epinephrine secretion. Recovery from hypoglycemia failed to occur only in the combined absence of glucagon and epinephrine. Cryer concluded that none of the following were critical to recovery from hypoglycemia in normal subjects: 1) acute release of cortisol or growth hormone, 2) release of sympathetic neural norepinephrine and 3) glucose autoregulation.

Most patients with Type I diabetes have defective[5,6,7] counterregulatory hormone responses. Gerich *et al* in 1973[6] showed that these patients have a severely impaired glucagon response to hypoglycemia, whereas their glucagon response to arginine is exaggerated. Boden *et al* (1981),[8] in describing a patient with severe insulin-induced hypoglycemia associated with profound counterregulatory failure of multiple hormones, suggested that their patient might simply represent an extreme example of a disorder affecting a substantial number of diabetics.

That many patients with IDDM have impaired glucose counterregulation due to multiple defects in counterregulatory-hormone secretion has also been demonstrated after conventional subcutaneous injection of insulin[7] in amounts used therapeutically for intensive insulin therapy. About half these patients showed a post-hypoglycemic hyperplycemia (see Somogyi phenomenon below), which appeared to be due to late hypoinsulinemia. The patients who did not have rebound hyperglycemia had higher free insulin concentrations during recovery from hypoglycemia and also higher insulin-antibody binding. Thus, it was concluded that in those patients with both defective glucose counterregulatory-hormone secretion and increased insulin-antibody binding (which prolongs the half-life of insulin), intensive insulin therapy may be hazardous.

Several groups,[9,10] have proposed tests to identify patients who are predisposed to severe hypoglycemic reactions. Bolli *et al*[10] claim that a 60-min, 30-mU/m^2/min infusion of insulin is safe and reproducible. No patient judged to have adequate glucose counterregulation by the test (post nadir rates of glucose recovery above 0.4 mg/dl/min or plasma glucose nadir above 45 mg/dl) developed hypoglycemia during up to seven months of intensive insulin therapy, whereas nearly all patients with inadequate counter-regulation did.

The Somogyi Phenomenon

Although rebound hyperglycemia (post hypoglycemia hyperglycemia, the "Somogyi phenomenon") was common in the recent study[7] (above) after subcutaneous insulin, there is considerable controversy about its prevalence and about the validity of Somogyi's concept[11,12] that overtreatment with insulin may be a direct cause of instability in some patients with buttle diabetes. Gale, Kurtz and Tattersall[13] searched for the Somogyi effect in 15 patients with asymptomatic untreated nocturnal hypoglycemia. Those patients (about 40%) with apparent rebound hyperglycemia did not have higher levels of growth hormone, cortisol or glucagon than those patients with little or no recovery of blood glucose. As there was a close reverse correlation between blood glucose and free insulin levels, it was suggested that rebound hyperglycemia was primarily due to relative free insulin deficiency rather than, as Somogyi had hypothesized, a response to antagonist hormones.

In a witty and iconoclastic review of the Somogyi phenomenon, Raskin[14] concluded that rebound hyperglycemia is not as common as has been suggested in IDDM patients. When it does occur it is most likely to be seen in children and adolescents or other IDDM patients with a short duration of diabetes. In practice, marked hyperglycemia (>220 mg/dl) after hypoglycemia is usually related to the ingestion of a meal (often too large) in an attempt by the patient to relieve the symptoms of hypoglycemia.[14]

Unrecognized Nocturnal Hypoglycemia in Insulin-Treated Diabetes

Overnight metabolic studies in a large number of poorly controlled IDDM patients led Gale and Tattersall[15] to conclude that "silent" nocturnal hypoglycemia was common over a broad spectrum of patient age and treatment. Using conventional split-dose insulin therapy, satisfactory free-insulin levels on rising in the morning were achieved at the cost of hyperinsulinemia in the early hours of the morning. Their conclusion was that insulin requirements are relatively constant during the night, and can best be met by intravenous infusions of 1 unit hourly before dawn. Diagnosis required a high index of clinical suspicion. A finger prick blood-sample taken at 3:00 a.m. would have shown the presence, though not the duration of hypoglycemia in 17 of their 22 patients with "silent" hypoglycemia.

The Dawn Phenomenon

The dawn phenomenon, a rise in early morning fasting blood glucose (123 ± 81.1 mg/dl) was first described by Schmidt *et al*[16] in IDDM and attributed to a low free insulin/blood glucose ratio. The dawn phenomenon contributed directly and significantly to the blood glucose maximum, and indirectly (because of resultant insulin therapy) in some cases to nocturnal hypoglycemia. By common usage the dawn phenomenon has come to mean a condition in IDDM in which plasma glucose and/or insulin requirements that were stable throughout the night abruptly increased between 5:00 and 9:00 a.m. in the absence of antecedent hypoglycemia. The phenomenon occured in 75% of IDDM patients, although its presence may vary from patient to patient and from day to day in the same patient. Recently the phenomenon was also observed in patients with non-insulin-dependent diabetes mellitus, whether or not treated with insulin, and in normal human volunteers.[17,18] It has been proposed that early morning increases in plasma glucose concentrations and insulin requirements observed in IDDM patients may be an exaggeration of a physiologic circadian variation in hepatic insulin sensitivity induced by changes in catecholamine and/or growth hormone secretion.[17] From the therapeutic point of view it is important not to confuse the "dawn" phenomenon with the "Somogyi" phenomenon, and to recognize that increased insulin requirements obtain only for a relatively brief period, for a few hours after 5:30 a.m., otherwise nocturnal or diurnal hypoglycemia may be the consequence of misplaced attempts at correction. Unger has suggested that pumps programmed to increase the basal rate during the night so as to prevent the dawn effect may be ill-advised, because glucose levels may rise over 100 mg/dl between the nocturnal nadir and dawn, so that a normal 7:00 a.m. glucose level may mean that the patient was in a dangerously hypoglycemic range while asleep. Whatever the philosophy of nocturnal insulin delivery, there is no alternative to regular testing for nocturnal hypoglycemia at about 2–3 a.m. to be certain that nocturnal hypoglycemia is avoided.

In summary, the hope that normalization of glycemic control may prevent or diminish the long-term complications of diabetes mellitus has stimulated the use of regimes of intensive insulin therapy in patients with IDDM. However, since most patients with IDDM have impaired glucose counterregulation there is considerable concern that unwise or ill-formed intensive therapy may provoke severe hypoglycemia in some patients. As hypoglycemia is unequivocally a preventable complication the risks versus benefits of the intensive insulin regime schedule need to be established for each individual patient. Of potential help are tests for identifying patients at risk of developing severe hypoglycemia. Also therapeutically important is an understanding of the circadian phenomenon of decreased insulin sensitivity (dawn phenomenon) and of the Somogyi phenomenon, now thought to result from a deficiency of free insulin. In order to avoid forms of silent hypoglycemia, including nocturnal hypoglycemia, there is no substitute for regular "round-the-clock" patient blood glucose monitoring.

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Selenium Deficiency And Cardiomyopathy In A Patient With Cystic Fibrosis

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Selenium deficiency has been reported to cause cardiomyopathy in individuals living in areas of the world where the soil is deficient in selenium and in patients on long term parenteral nutrition. Described herein is a child with severe protein calorie malnutrition and Cystic Fibrosis who developed sudden cardiac decompensation, thought to be related to deficiency of this trace element.

Case Report

A 6½-month-old white male was admitted for evaluation of loose stools, edema and failure to thrive. Prior to admission, the patient had multiple formula changes because of poor weight gain and was presently consuming 32 oz. of Isomil daily. He passed four to six large, loose, pale stools per day and had a dry, hacky cough.

Physical exam revealed a pale, lethargic white male with a weight of 5.1 kg. and a height of 60 cm. Chest and cardiovascular exam were normal. Abdominal exam was normal except for a liver edge 4 cm. below the right costal angle. There was significant pitting edema of both feet and legs up to the hips. The skin was dry and an erythematous papular rash spread from the perineum down the extremities and across the trunk. A maculopapular rash and cheilosis were also noted on the face.

A CBC showed a Hgb. of 6.7 gm/dl with a WBC count of 7,800 and normal differential and platelet count. Serum iron was 18 mgm/dl and transferrin was 39 mg/dl. Serum electrolytes, glucose, BUN, creatinine, Ca, PO_4, and magnesium were normal. Total protein was 2.9 gm/dl with an albumin of 2.0 gm/dl. His SGOT was 114 IU/L, SGPT was 64 IU/L, total bilirubin was 0.2 mg/dl, direct bilirubin 0.1 mg/dl, and alkaline phosphatase was 127 u/L. Prothrombin time was 35.2 seconds (control 11.9 sec) and partial thromboplastin time was 48.8 sec (control 23 sec).

Serum zinc was 40 ugm/dl (normal 60 to 120), Copper was 50 μgm/dl (normal 70 to 140), and serum selenium was 5 μgm/dl on two separate determinations (normal 10-20 μgm/dl). Vitamin E was 0.7 mgm/dl (normal 0.8 or greater), and Vitamin A was 40 IU/dl (normal 65-275 IU/dl). Glutathione Peroxidase was 0.021 units/mg Hgb (normal 0.034-0.037).

Seventy-two hour fecal fat collection revealed a coefficient of fat absorption of only 56% (normal 90% or greater).

Chest x-ray showed a normal size heart, with hyperaeration of the lungs and a right upper lobe collapse.

Sweat chloride was 88 meg/L (normal less than 50). Duodenal aspirate was negative for parasites and bacteria and had no tryptic activity, an amylase of 1239 IU/L and a lipase of 18 IU/L.

The patient was begun on total parenteral nutrition, albumin infusions, and Lasix. Diuresis was poor and the patient developed progressive hepatomegaly. Two weeks after admission the patient spiked a temperature of 103° associated with tachypnea. Chest X-ray showed marked cardiomegaly and pulmonary edema. Lab work was unremarkable except for a phosphorus of 0.5 mg/dl. EKG showed incomplete right bundle branch block. Echocardiogram showed a dilated left ventricular cavity with 15% fiber shortening.

Cardiac catherization demonstrated elevated pressures in the main pulmonary artery and all chambers, reduced cardiac output, and no structural cardiac defects. The patient was placed on a ventilator and treated with digitalis, diuretics, dobutamine, nitroprusside, and 100 μgm/day of IV selenium. The patient improved and over a three week period all cardiac drugs were weaned and discontinued. Viral cultures and titers of mumps, Echo, Coxsackie A & B 1-6, CMV and EB virus were negative. Repeat Sweat chloride prior to discharge was 90 meg/L. The patient was discharged on Viocase, Portagen, vitamins, and oral sodium selenite at a dose of

200 μgm/day. Selenium level two weeks after discharge was 9 μgm/dl and oral selenium was decreased.

Discussion

Selenium appears to be an essential trace mineral for mammals, including man. It is an integral component of the red cell enzyme glutathione peroxidase. Glutathione peroxidase, an antioxidant, prevents the accumulation of lipid peroxide radicals normally formed from cell metabolism that damage lipid membranes and cell molecules.

Dietary deficiency of selenium in animals has resulted in liver necrosis and pancreatic atrophy in the rodent, muscular dystrophy in cattle and sheep and myocardial degeneration in most species studied.[1]

The serum selenium concentration depends upon dietary intake. Rich dietary sources for selenium are seafood, meat, poultry, and cereals. The selenium content of most commercial formulas is 6 to 8 ng/ml, approximately half that of breast milk, yet enough to meet the proposed daily requirement of 50 to 250 μgm/day. Total parenteral nutrition fluids contain only 1 μg of selenium per 2000 cc — far below the daily requirement.[2] Thus far, reported selenium deficiency in humans has been related to insufficient intake.

Keshan's disease is a cardiomyopathy that occurs primarily in children from areas of rural China where the soil is deficient in selenium. Patients who die have large globular shaped hearts with dilatation of all chambers. Histologically, one finds necrotic foci and fibrosis scattered through the myocardium. Electronmicroscopy shows myofibrillar atrophy and fragmentation. It has been subsequently discovered that people in this area have very low blood and hair selenium levels, and selenium supplementation of the diet has resulted in a significant decrease in the incidence and morbidity from this disease.[3]

Two case reports document selenium deficiency and fatal cardiomyopathies in patients on long term parenteral nutrition. Pathologic examination of the heart was similar to that seen in Keshan's Disease. Selenium concentrations in heart, skeletal muscle, and blood were very low.[4,5]

Selenium deficiency has also been described in patients with severe protein calorie malnutrition. One patient described had persistent metabolic acidosis and edema until selenium supplementation was begun.[6]

Selenium levels in **treated** patients with Cystic Fibrosis have been only slightly lower than control children. However, younger, newly diagnosed patients have significantly lower serum selenium levels.[7] Impaired absorption of selenium in Cystic Fibrosis is suggested by one study of two patients in which only 60 to 70% of the radioactive selenium was absorbed compared to 75 to 100% absorption in the adults controls.[8]

A fulminant cardiomyopathy has been described in infants with pancreatic insufficiency primarily due to Cystic Fibrosis in which post mortem examination of the heart shows extensive necrosis and scarring fibrosis. The etiology is unknown, however, it is speculated to be due to a nutritional deficiency such as Vitamin E.[9] Perhaps it is related to selenium deficiency.

This patient had multiple vitamin and mineral deficiencies including selenium. Unlike previously described patients with selenium deficiency, our patient had adequate dietary intake. Pancreatic insufficiency due to Cystic Fibrosis and altered gastrointestinal function due to malnutrition resulted in malabsorption of multiple nutrients — including selenium. The enlarged, poorly contractile heart that he developed is very similar to the cardiomyopathies described in Keshan's Disease and in Cystic Fibrosis. An infectious etiology could not be demonstrated by viral culture or titers. Factors other than selenium deficiency that could have contributed to his cardiac dysfunction include a brief episode of hypophosphatemia and low serum Vitamin E. Vitamin E deficiency is speculated to cause cardiac dysfunction and has been reported to facilitate toxicity from selenium deficiency in animals.[10] A combination of nutritional deficiencies may have resulted in his cardiac dysfunction.

Conclusion

Selenium deficiency should be considered in any patient developing obscure cardiac dysfunction in association with total parenteral nutrition, a malabsorption syndrome such as cystic fibrosis, or severe protein calorie malnutrition. If selenium deficiency exists, supplementation of intravenous feeding or diet combined with vigorous cardiac supportive care may result in improvement or reversal of cardiac dysfunction as it did in this patient. Perhaps routine screening for selenium deficiency should be performed in high risk patients so that dietary supplements can be started early before signs of cardiac disease develops.

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Three Fungal Infections in an AIDS Patient

GARY P. HOLMES, M.D. AND ROBERT C. NOBLE, M.D., F.A.C.P.

A 38-year-old man with AIDS grew* Histoplasma capsulatum *from a bone marrow culture at the same time perineal lesions grew Herpes simplex virus, type 2 and cytomegalovirus. On a subsequent hospitalization he had esophagitis caused by* Candida albicans *and pulmonary cryptococcosis and histoplasmosis.* Cryptococcus neoformans *was also grown from his blood. Despite therapy, he died following pulmonary infection with* Pneumocystis carinii. *AIDS should be considered when otherwise healthy patients develop disseminated histoplasmosis.

Numerous opportunistic infections have been associated with the acquired immune deficiency syndrome (AIDS),[1] and several are so closely related that they are considered criteria for diagnosis of AIDS in otherwise normal hosts. Reports of disseminated histoplasmosis in AIDS patients began in late 1983,[2-9] sparking the suggestion that disseminated histoplasmosis be considered as one of the diagnostic criteria for AIDS.[6] The present report presents an unusual patient with AIDS who not only had disseminated histoplasmosis, but disseminated cryptococcosis and candida esophagitis as well.

Case Report

A 38-year-old married white male was referred to the University of Kentucky Medical Center on 10-23-84 with a six-month history of fever to 102°F, weight loss, splenomegaly, leukopenia, and recurrent urinary tract infections. He also had a two-month history of progressive, ulcerative perianal lesions. A bone marrow biopsy had shown absent iron stores, with a possible granuloma.

He denied travel outside of northern Kentucky and southern Ohio, but admitted to one homosexual contact with anal-receptive intercourse about a month after the onset of symptoms. There was no history of veneral disease, use of amyl nitrite, or intravenous drugs. He had a moderately heavy ethanol use until August 1984. He also had developed a skin rash on cotrimoxazole therapy in July 1984. He was formerly a frequent blood donor.

Physical examination revealed a thin, chronically ill white male, who had a temperature of 100.6°F. His physical examination was normal except for a palpable spleen and multiple coalescent erythematous, weeping, pustular, ulcerative lesions involving the entire perineum and perianal region. Rectal erythema was present on proctoscopic examination, and histologic examination revealed viral inclusion bodies consistent with herpes simplex or cylomegalovirus. He was anergic to skin testing. The white blood cell count was 3200/mm^3 with 44 segmented forms, 15 bands, 36 lymphocytes, and 5 monocytes. His hemoglobin was 11.1 g/dl; hematocrit, 34.4%; and platelets, 151,000/mm^3. The erythrocyte sedimentation rate was 71 (Zeta technique). The roentgenogram of the chest was normal except for a calcified right lower lobe granuloma. Urinalysis, liver enzymes, electrolytes, blood and urine cultures, serum Rapid Plasma Reagin Card test for syphilis, antinuclear antibody, and rheumatoid factor were all normal. Repeat bone marrow examination showed slight hypercellularity, decreased iron stores, and a possible granuloma with negative bacterial, acid fast, and fungal smears. The bone marrow cultures grew *Histoplasma capsulatum.* Group B streptococci, Herpes simplex virus, Type 2, and cytomegalovirus grew from the perianal lesions. T-cell marker studies were performed, with total lymphocyte count of 400/mm^3 (16% of total WBC), 83% T-cells, 13% B-cells, 5% OKT_4 + cells and 77% OKT_8 +. The OKT_4 to OKT_8 cell ratio was 0.06.

The patient was readmitted on 11-8-84 with increasing malaise, nausea, vomiting, dysphagia, anorexia, nonproductive cough, persistent spiking fever, and dehydration. He had white oropharyngeal plaques which grew *Candida albicans.* New bilateral hard, white, retinal exudates were also observed. He had diffuse pulmonary rales, inguinal lymphadenopathy, and worsening perianal ulcerations. The chest roentgenogram revealed

bilateral diffuse micronodular infiltrates, and small bilateral pleural effusions. A bronchoscopic study showed normal bronchial structures, but yeast forms were found on the Gomori methenamine silver stain. Histoplasma complement fixation serology was positive at titers of 1:32 mycelial antigen and 1:8 yeast antigen. Repeated cultures of sputum and bronchial washings grew *Candida albicans*, *Cryptococcus neoformans*, and *Histoplasma capsulatum*. Several blood cultures also grew *Cryptococcus neoformans*. A cosyntropin stimulation test revealed normal adrenal function, and a polyclonal IgA gammopathy was found on serum immunoelectrophoresis. The patient was started on amphotericin B and advanced rapidly to 50 mg intravenously per day five days a week, and acyclovir 300 mg intravenously every eight hours. He had a slow but remarkable improvement of his cough and perineal ulcerations, and he was again discharged on 11-28-84 for outpatient amphotericin B and acyclovir therapy.

He was admitted for the third time on November 30, 1984, with acute severe pleuritic chest pain, increased cough productive of thick orange sputum, dyspnea, diaphoresis, and fevers to 104°F. Examination demonstrated worsened bilateral rales and healing of the perianal lesions. His chest roentgenogram showed new bilateral perihilar infiltrates and persistent small pleural effusions. A repeat bronchoscopy revealed *Pneumocystis carinii* by histologic techniques, and the patient was started on pentamidine isethionate 280 mg. intravenously every day, with continuation of amphotericin and acyclovir. Five days later, a large right exudative, sterile pleural effusion developed. A pleural biopsy was nondiagnostic. Over the next three days, the patient became progressively more dyspneic and hypoxemic. He developed acute renal insufficiency, metabolic acidosis, and died after a respiratory arrest, 55 days after his first hospitalization. Permission for autopsy was denied. He had received 150 mg of amphotericin B at the time of death.

Serum obtained prior to death was positive for HTLV-III/LAV antibody by ELISA technique performed at the Centers for Disease Control.

Discussion

We agree with Wheat, *et al*[9] that disseminated histoplasmosis is an important opportunistic infection in patients with AIDS from endemic areas and that AIDS should be strongly considered in otherwise healthy patients who develop disseminated histoplasmosis. To date, 17 AIDS patients with disseminated histoplasmosis have been reported in the literature.[2-9] Our patient with AIDS and disseminated histoplasmosis was typical of previously reported cases in that he was a homosexual man in his 30's, who had, in addition, infections with cytomegalovirus, herpes simplex virus, *Pneumocystis carinii*, *Candida albicans*, and *Cryptococcus neoformans*. Multiple infections in AIDS patients are common, but multiple fungal infections are less so. Candida esophagitis and extrapulmonary cryptococcosis are associated diseases in the surveillance criteria for AIDS, but multiple systemic fungal infections in the same patient are quite uncommon. Of the 16 previously reported AIDS patients with disseminated histoplasmosis, only three had, in addition, Candida esophagitis[2,9] and none have had superimposed systemic cryptococcosis. Our case serves to alert physicians to continue the search for additional opportunistic organisms in AIDS patients who have fever. We would recommend serologic testing for histoplasma along with fungal stains and cultures of bone marrow in evaluating these patients, especially those residing in endemic regions for histoplasmosis.

Acknowlegements

We would like to thank Joan Ladd and Lucille Waldo for their assistance in preparing the manuscript.

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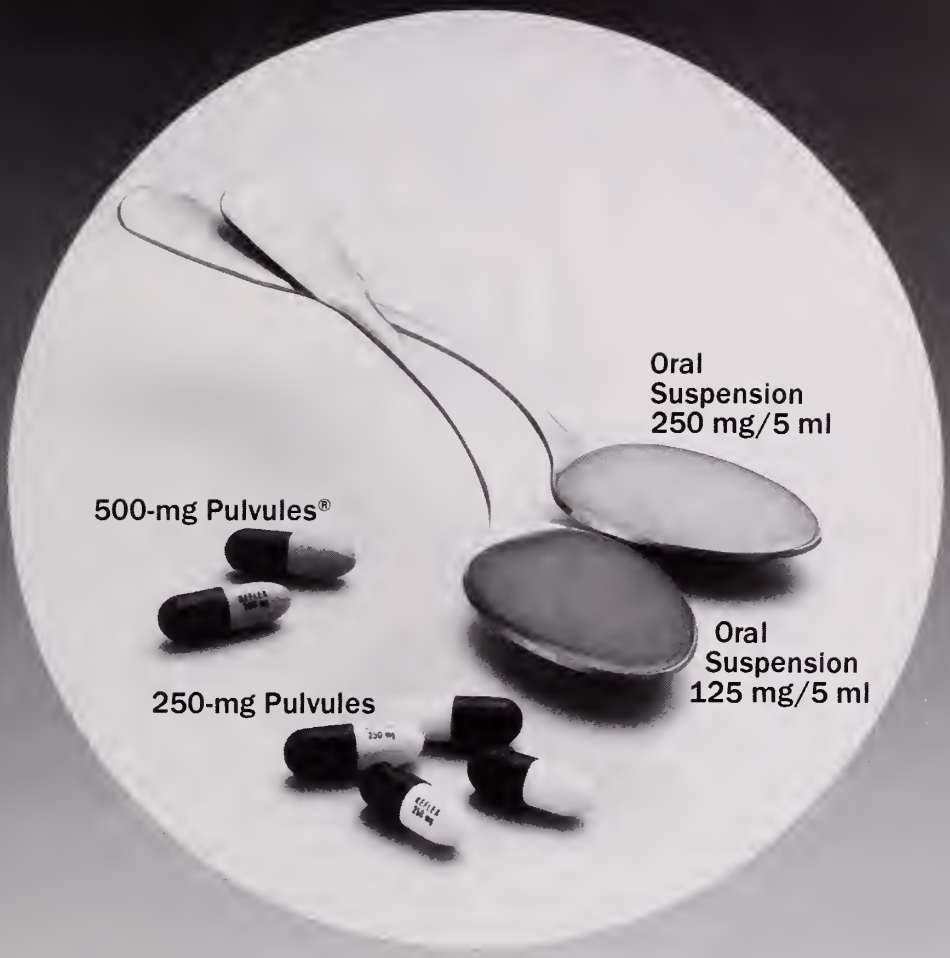

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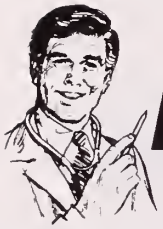

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See important information on following page.

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Brief Summary

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INFORMATION FOR PATIENTS: Advise patients on **Wytensin** to exercise caution when operating dangerous machinery or motor vehicles until it is determined they do not become drowsy or dizzy. Warn patients that tolerance for alcohol and other CNS depressants may be diminished. Advise patients not to discontinue therapy abruptly.

LAB TESTS: In clinical trials, no clinically significant lab test abnormalities were identified during acute or chronic therapy. Tests included CBC, urinalysis, electrolytes, SGOT, bilirubin, alkaline phosphatase, uric acid, BUN, creatinine, glucose, calcium, phosphorus, total protein, and Coombs' test. During long-term use there was small decrease in serum cholesterol and total triglycerides without change in high-density lipoprotein fraction. In rare instances occasional nonprogressive increase in liver enzymes was observed, but no clinical evidence of hepatic disease.

DRUG INTERACTIONS: **Wytensin** was not demonstrated to cause drug interactions when given with other drugs, e.g., digitalis, diuretics, analgesics, anxiolytics, and antiinflammatory or antiinfective agents, in clinical trials. However, potential for increased sedation when given concomitantly with CNS depressants should be noted.

DRUG/LAB TEST INTERACTIONS: No lab test abnormalities were identified with **Wytensin** use.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: No evidence of carcinogenic potential emerged in rats during a two-year oral study with **Wytensin** at up to 9.5 mg/kg/day, i.e., about 10 times maximum recommended human dose. In the Salmonella microsome mutagenicity (Ames) test system, **Wytensin** at 200-500 mcg per plate or at 30-50 mcg/ml in suspension gave dose-related increases in number of mutants in one (TA 1537) of five *Salmonella typhimurium* strains with or without inclusion of rat liver microsomes. No mutagenic activity was seen at doses up to those which inhibit growth in the eukaryotic microorganism, *Schizosaccharomyces pombe*, or in Chinese hamster ovary cells at doses up to those lethal to the cells in culture. In another eukaryotic system, *Saccharomyces cerevisiae*, **Wytensin** produced no activity in an assay measuring induction of repairable DNA damage. Reproductive studies showed a decreased pregnancy rate in rats given high oral doses (9.6 mg/kg), suggesting impairment of fertility. Fertility of treated males (9.6 mg/kg) may also have been affected, as suggested by decreased pregnancy rate of mates, even though females received drug only during last third of pregnancy.

PREGNANCY: Pregnancy Category C. WYTENSIN® MAY HAVE ADVERSE EFFECTS ON FETUS WHEN ADMINISTERED TO PREGNANT WOMEN. A teratology study in mice indicated possible increase in skeletal abnormalities when **Wytensin** is given orally at doses 3 to 6 times maximum recommended human dose of 1.0 mg/kg. These abnormalities, principally costal and vertebral, were not noted in similar studies in rats and rabbits. However, increased fetal loss has been observed after oral **Wytensin** given to pregnant rats (14 mg/kg) and rabbits (20 mg/kg). Reproductive studies in rats have shown slightly decreased live birth indices, decreased fetal survival rate, and decreased pup body weight at oral doses of 6.4 and 9.6 mg/kg. There are no adequate, well-controlled studies in pregnant women. **Wytensin** should be used during pregnancy only if potential benefit justifies potential risk to fetus.

NURSING MOTHERS: Because no information is available on **Wytensin** excretion in human milk, it should not be given to nursing mothers.

PEDIATRIC USE: Safety and effectiveness in children less than 12 years of age have not been demonstrated, use in this age group cannot be recommended.

Adverse Reactions: Incidence of adverse effects was ascertained from controlled clinical studies in U.S. and is based on data from 859 patients on **Wytensin** for up to 3 years. There is some evidence that side effects are dose-related. Following table shows incidence of adverse effects in at least 5% of patients in study comparing **Wytensin** to placebo, at starting dose of 8 mg b.i.d.

Adverse Effect	Placebo (%) n = 102	**Wytensin** (%) n = 109
Dry mouth	7	28
Drowsiness or sedation	12	39
Dizziness	7	17
Weakness	7	10
Headache	6	5

In other controlled clinical trials at starting dose of 16 mg/day in 476 patients, incidence of dry mouth was slightly higher (38%) and dizziness was slightly lower (12%), but incidence of most frequent adverse effects was similar to placebo-controlled trial. Although these side effects were not serious, they led to discontinuation of treatment about 15% of the time. In more recent studies using an initial dose of 8 mg/day in 274 patients, incidence of drowsiness or sedation was lower, about 20%. Other adverse effects reported during clinical trials but not clearly distinguishable from placebo effects and occurring with frequency of 3% or less: Cardiovascular—chest pain, edema, arrhythmias, palpitations. Gastrointestinal—nausea, epigastric pain, diarrhea, vomiting, constipation, abdominal discomfort. Central nervous system—anxiety, ataxia, depression, sleep disturbances. ENT disorders—nasal congestion. Eye disorders—blurring of vision. Musculoskeletal—aches in extremities, muscle aches. Respiratory—dyspnea. Dermatologic—rash, pruritus. Urogenital—urinary frequency, disturbances of sexual function. Other—gynecomastia, taste disorders.

Drug Abuse and Dependence: No dependence or abuse has been reported.

Overdosage: Accidental ingestion caused hypotension, somnolence, lethargy, irritability, miosis, and bradycardia in two children aged one and three years. Gastric lavage and pressor substances, fluids, and oral activated charcoal resulted in complete and uneventful recovery within 12 hours in both. Since experience with accidental overdosage is limited, suggested treatment is mainly supportive while drug is being eliminated and until patient is no longer symptomatic. Vital signs and fluid balance should be carefully monitored. Adequate airway should be maintained and, if indicated, assisted respiration instituted. No data are available on **Wytensin** dialyzability.

Dosage and Administration: Individualize dosage. A starting dose of 4 mg b.i.d. is recommended, whether used alone or with a thiazide diuretic. Dosage may be increased in increments of 4 to 8 mg/day every one to two weeks, depending on response. Maximum dose studied has been 32 mg b.i.d., but doses this high are rarely needed.

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The Decline In Surgery For Peptic Ulcer Disease

GERALD M. LARSON, M.D. AND PATTIE R. DAVIDSON, R.N.

It is often assumed that the incidence of peptic ulcer disease has declined in the past three decades. This report summarizes the results of a 25-year review of peptic ulcer surgery at two Louisville hospitals. From 1960 to 1984, the annual number of duodenal ulcer operations fell 75%, while the number of duodenal perforations treated each year decreased by 50%. The volume of gastric ulcer surgery also declined 50% during this period. Possible explanations for the reduced demand for operative treatment for ulcer disease are discussed.

It is a common impression among physicians and surgeons who treat patients with digestive complaints that the incidence of peptic ulcer disease has decreased in the United States and that the manifestations of ulcer disease have become less severe. There is ample evidence available to show that hospitalizations, deaths, and operations performed for peptic ulcer disease have steadily declined in the last 25 years, particularly for duodenal ulcer disease.[1-4] In the past, persistent and intractible symptoms were a common indication for operation, but now, referrals to the surgeon more often are for complications of ulcer disease—bleeding, perforation and obstruction.[5] There are, however, data that challenge the concept that ulcer disease is gradually disappearing. Information from the pharmaceutical industry indicates that since 1979 the number of prescriptions written for anti-ulcer drugs has increased by at least 10% annually.[6]

We recently examined the operative statistics for gastric and duodenal ulcer surgery at two Louisville hospitals. The purpose of this report is to present the results of this 25-year review.

Methods

The information was obtained from the Medical Records Department of each hospital. We reviewed the charts which were coded for diagnoses and operative procedures likely to identify all patients who had operations on the stomach and duodenum including those with ulcer disease. The following codes were examined: gastrectomy of any kind, vagotomy of any kind, procedures for gastric or duodenal perforations, antrectomy, pyloroplasty, perforated ulcer, peptic ulcer, and gastric or duodenal ulcer disease. We excluded patients who had gastric operations for injury to the stomach, feeding gastrostomy and bypass procedures for obesity. At Louisville General Hospital and Humana Hospital University, we studied the records from 1960, 1961, 1970, 1980, and 1984. At the Norton Hospital, this information was first readily accessible in 1974, and we chose to study the years 1974, 1976, 1980 and 1984.

Results

The total number of gastric procedures performed for ulcer disease at the University Hospital in Louisville (Louisville General Hospital through 1983, then Humana Hospital University) are shown in Table 1. These combined data for gastric ulcer and duodenal ulcer show that there has been a gradual but steady decline in the number of stomach procedures performed at these hospitals since 1960. Duodenal ulcer operations fell from 84 procedures per year in 1960 to 18 in 1984, a 75% decrease (Fig. 1). There was also a 50% reduction in the number of procedures for perforated duodenal ulcer over this period.

The data on gastric ulcers is presented in Figure 2. From 1960-1970, the number of gastric ulcer cases remained constant at 20 each year, but this figure decreased to eight and nine procedures in 1980 and 1984, roughly a 50% reduction in the number of gastric ulcers treated by operation.

The operative case load for peptic ulcer surgery at the Norton Hospital from 1974 through 1984 was as follows: 32 ulcer operations in 1974, 45 in 1976, 26 in 1980, and 25 in 1984. Using 1974 as the index

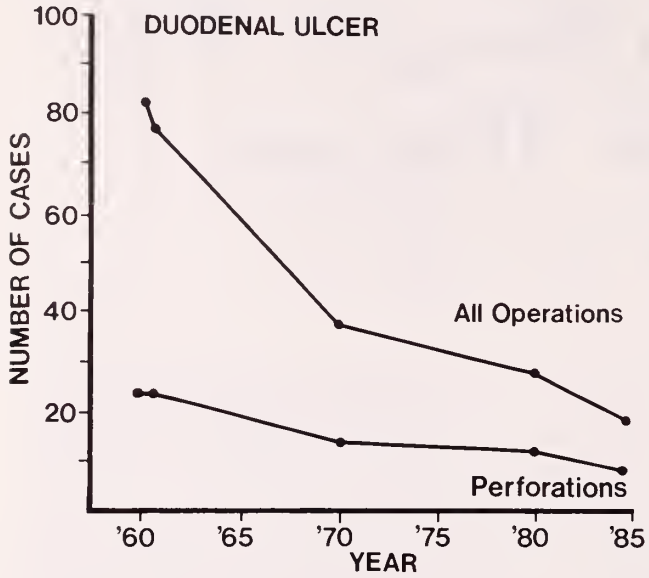

Fig. 1: The number of operations performed for duodenal ulcer and for perforated duodenal ulcer at the Louisville General Hospital and Humana Hospital University has steadily declined over the past 25 years. This decline started before cimetidine treatment for ulcers was introduced in 1977.

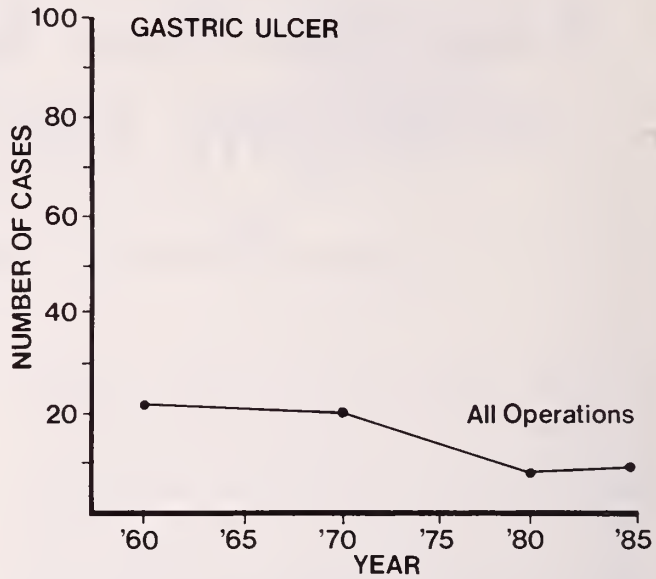

Fig. 2: The number of gastric ulcer procedure performed at the University of Louisville hospitals has also decreased by more than 50% in the last 25 years.

year, over the next 10 years, there was a 22% decrease in the annual number of peptic ulcer operations performed with parallel decreases observed for both duodenal and gastric ulcers.

The selection of operations performed also changed during the period of this review. In 1953, most perforated duodenal ulcers were treated by suture closure, while subtotal gastrectomy was the standard procedure for duodenal ulcer disease at the University of Louisville. By 1980, surgeons were treating most perforations definitively with vagotomy and pyloroplasty, and they were performing vagotomy and antrectomy or vagotomy and pyloroplasty for elective duodenal ulcer cases. Subtotal gastrectomy has been the standard procedure for gastric ulcer throughout the three decades of this study.

Discussion

Results of this survey clearly indicate that the number of operations performed for benign peptic ulcer disease at these two University hospitals has declined over the last 25 years. The number of procedures performed for gastric ulcer has remained about one-third to one-fourth the number of operations for duodenal ulcer disease, and the frequency of gastric ulcer surgery has also declined about 50% over this interval. The period of observation at the Norton Hospital spanned one decade, and the results also show about a 25% reduction for duodenal ulcer operations and for gastric ulcer procedures. These results are consistent with trends documented in several other North American studies.

In 1977, Smith counted the number of duodenal ulcer procedures performed in five Seattle area hospitals over the 10-year period from 1966-75.[3] He observed a 35% decline in the number of perforated duodenal ulcers and in the number of duodenal ulcer operations, which he thought represented an overall decline in the incidence of duodenal ulcer disease in the Seattle area. Elashoff and Grossman examined hospital admissions and death rates for peptic ulcer in the United States from 1970 to 1978 by a computer search of the discharge information obtained from 5,928 nonfederal, short-term hospitals in the United States.[1] They found that during the period 1970-78, admissions for duodenal ulcer disease decreased by 43% whereas admissions for gastric ulcer did not change significantly. In this same period, deaths from peptic ulcer disease decreased by 28% as well.

A survey conducted by Fineberg and Pearlman at the Harvard School of Public Health also provides interesting data. In 1981, they published a study on the surgical treatment of peptic ulcer disease in the United States before and after the introduction of cimetidine.[2] Information for their study was provided by the U.S. National Center for Health Statistics, which samples and surveys surgical procedures each year. They found that the number of ulcer operations in the U.S. fell steadily from 136,000 procedures in 1966 to 97,000 in

TABLE I

TOTAL NUMBER OF OPERATIONS PERFORMED FOR GASTRIC ULCERS AND DUODENAL ULCERS AT UNIVERSITY HOSPITALS*

Year	1960	1970	1980	1984
No. Operations	108	57	35	27

*Louisville General Hospital and Humana Hospital University.

TABLE II

POSSIBLE EXPLANATIONS FOR THE DECLINE IN HOSPITALIZATIONS, DEATHS, AND OPERATIONS FOR PEPTIC ULCER IN THE UNITED STATES

A real decrease in ulcer incidence.
Improved accuracy of the diagnosis since introduction of endoscopy.
Stricter hospitalization criteria.
Changes in medical therapy.
Cimetidine treatment has reduced the need for surgery.
The natural history of peptic ulcer disease is changing.

1977, a 30% decline over 12 years. In 1978, the first complete year after cimetidine introduction, the number of operations dropped to 69,000 but rose again in 1979 to 81,000. The extensive use and efficacy of cimetidine could explain the unexpectedly large decline in surgery for ulcer disease in 1978 and for the subsequent rise in 1979. Most data would suggest that cimetidine delays an operation rather than making it unnecessary, since once cimetidine treatment is stopped, the ulcer recurrence rate seems to be as high as with other forms of therapy.

Similar trends have been noted in the United Kingdom. Brown *et al* reported a decrease in hospital admissions for ulcer disease of about 26% in the 14-year period 1958-72 in England, Wales, and Scotland. This represented a 16% decline for duodenal ulcer and a 41% decline for gastric ulcer disease.[7]

These declining trends in ulcer disease are not necessarily occurring worldwide however. Reports by Koo and colleagues in Hong Kong show that between 1970 and 1980, there was a 21% increase in hospital admission rates for ulcer disease and a 71% increase in the number of peptic ulcer perforations, while the mortality rate due to peptic ulcer declined 26%.[8] Sonnenberg and Fritsch studied the mortality rates from gastric and duodenal ulcer in the Federal Republic of Germany during the period 1952-80.[9] In 1983, they reported that the overall mortality of peptic ulcer disease had declined, but that there was an increase in mortality due to gastric and duodenal ulcers in women, particularly those over 60 years of age. This shift is at odds with patterns observed in other western countries.

Work by several authors suggests that the incidence of perforation reflects the prevalence of peptic ulcer disease as a whole.[3,7] Because ulcer perforations are usually recognized and treated, this condition may serve as a good index of changes in ulcer prevalence. This corresponds to the 35% reduction of perforations cited by Smith in a 10-year survey of the Seattle area.

Is it possible that cimetidine treatment and subsequent anti-ulcer agents have been responsible for the decline in ulcer surgery during the past 25 years? Data show that the steady decline in ulcer indices preceded cimetidine therapy by several years. At the same time, Fineberg and Pearlman's review[2] indicates that ulcer deaths, ulcer related hospital admissions, and ulcer operations performed in 1978 were clearly much less than the predicted figure, although there was some rebound in 1979. They did not carry their study out beyond 1979, and therefore, it is not known whether this decrease was only transient and related to cimetidine treatment, which seems to postpone but not eliminate eventual ulcer surgery in these patients. In our own series, the decrease in the volume of ulcer surgery started in the 1960s and '70s long before cimetidine was introduced in 1977.

One contrary observation suggests that the incidence and prevalence of ulcer disease may be in fact increasing rather than decreasing. This information comes from the pharmaceutical industry and their monitoring services, which indicate that since 1979 the annual number of prescriptions written for the anti-ulcer drugs — cimetidine, ranitidine, and sucralfate — has increased from 9.8 million in 1979 to 26.7 million in 1984.[6] Therefore, even though the documented cases of ulcer disease are declining, the general in-hospital and outpatient usage of anti-ulcer medication is on the increase.

Several explanations for this apparent decrease in peptic ulcer surgery have been postulated (Table I). If the number of perforations reflect the overall incidence of ulcer disease as some have claimed, it would appear that there is a true decrease in the incidence of ulcer disease. At the same time, it certainly can be argued that the admission criteria to hospitals have become stricter in the last 25 years and that medical therapy of ulcer disease has indeed improved, both of which will affect ulcer statistics. The data from the pharmaceutical industry suggests that ulcer type symptoms and treatment thereof are not subsiding in North America but, in fact, are increasing. While it appears that the

natural history of ulcer disease is undergoing change, one thing is certain: there has been a dramatic decline in the demand for surgical treatment of both duodenal and gastric ulcers in recent years.

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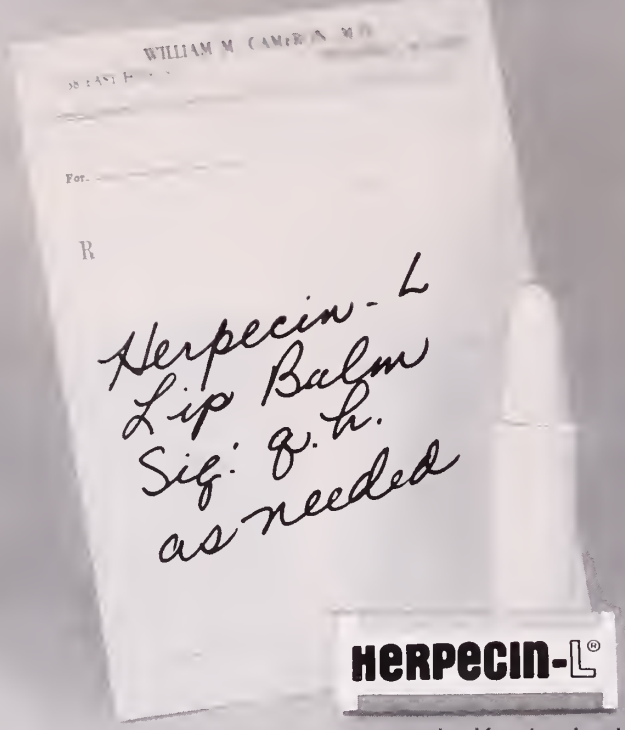

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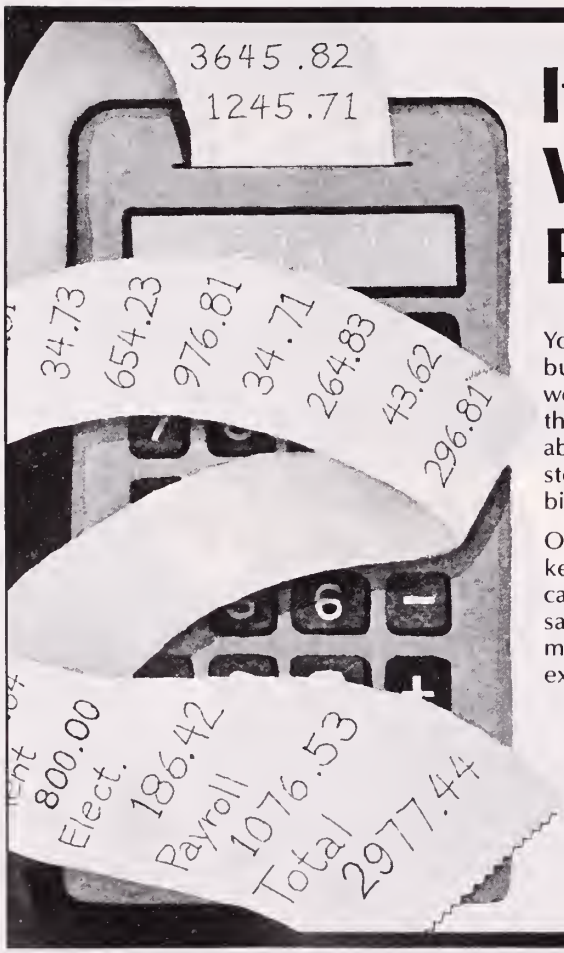

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Don't look now, but THEY are gaining on us. It's a jungle out there. We are receiving shot and shell from all sides.

Let's start at the top and work our way down. First, the federal government was (and is) quietly going broke under its many burdens, only one of which is Medicare. To conserve money the idea of DRG's was divised to shift the loss to the hospitals. The government wants the same quality for less money but no one can define "quality." Then the Feds divorce themselves from the problem of premature discharge and put out a "white paper" stating that no one may be put out of the hospital on the basic exhausted DRG funds. This far the physician has been financially protected in the above ploy. He still gets his full fee no matter how long or short the stay.

But wait. There is something wrong! The surgeon gets his full fee for his service but the primary care physician treating a medical problem is paid by the day or the visit. A shorter stay to enhance the hospital's viability means a lower payment for medical care. But keep the "quality" the same. Lurking in the wings is the more sinister "prospective payment" systems..... saying in effect "that is all the money we are going to give you, make it last the best you can." Even more baleful is the thought of mandatory acceptance of assignment by everyone. That decree states that physicians must accept whatever Medicare decides to pay as the full payment. If you even try to bill the patient for the remainder, then felony charges will be brought. But keep the "quality" the same.

Now add the malpractice crunch by our litigious society. "If the result is not perfect then someone must have done something wrong" is the way it usually goes. Insurance companies for both hospitals and physicians are being hit hard. To soften the blow and to avoid the "deep pocket" syndrome, insurance companies are refusing to insure hospitals unless 100% of the medical staff carry $1,000,000 of malpractice insurance. Hospitals are knuckling under this demand and passing by-laws to the effect that physicians must carry that level of insurance or resign from staff. Well isn't that just dandy? Freeze Medicare fees. Accept assignment. Make less income. Pay the same or higher overhead. Buy more malpractice insurance at a higher premium. (Heaven help you if you are a Class 9) But keep the "quality" the same.

So Quality Assurance becomes the battle cry. The JCAH (Joint Commission on Accreditation of Hospitals) decree that all hospitals now set up a new committee for quality assurance. Every facet of the hospital from housekeeping to pharmacy to engineering and dietary must document their attempt to assure quality.

Medical records workers now scrutinize our charts for attestations, signatures, dates and the diagnosis that gives the "best" DRG reimbursement. At the same time, hospitals put together business deals (joint venturing they call it) to huckster themselves as the best that can be found for this and for that. "Advertise to stay alive" that is the credo.

The only ones not pleading for quality are the third party payers and industry who buy the insurance package. Give us a lower premium they cajole us or they will shop around for other coverage at the best price. They are not concerned about quality (that cannot be measured) but about the bottom line. It is the patient (now called a consumer) who may have to move from a physician they know to one who is currently on their panel.

Now in the best case scenario both the patient and doctor will be satisfied. An appropriate history and physical are done. Relevant laboratory tests are ordered. Diagnosis, treatment and cure are effected. But I can just as easily make a worse case picture whereby the for-profit mode comes into play. From this comes the need to cut corners thus starting a medical cascade of disasters ending in poor results. We all remember too well the recent Challenger catastrophe whereby NASA felt it safe to launch in spite of reservations by others.

Forces beyond us are taking over and it may never be the same again. The sterling hallmarks of warmth, caring, availability, altruism and sensitivity are being eroded away by deficit spending and government regulations. But keep the "quality" the same.

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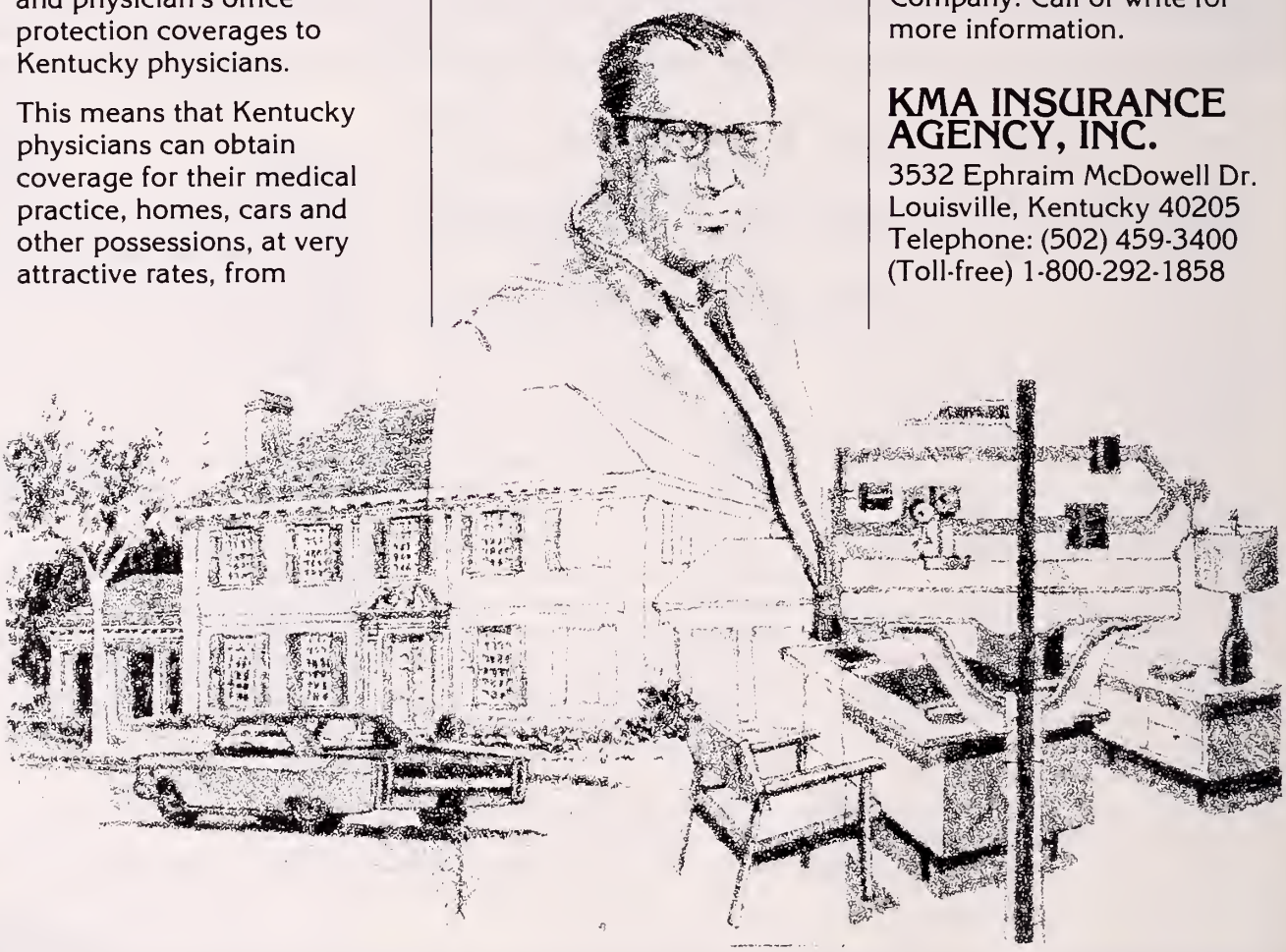

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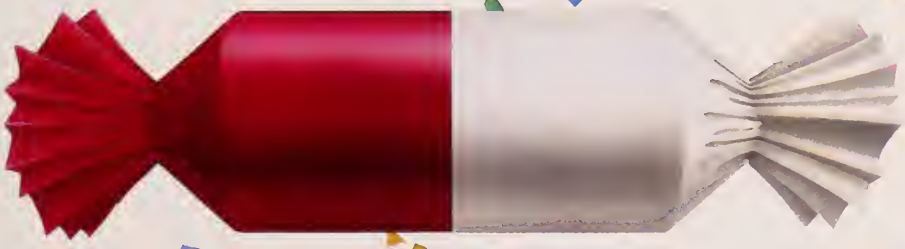

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Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984 2385

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For too long we were known as "tea timers," only coming together for socializing and fellowship. While these two purposes for meeting still exist and have much to give us in a peer relationship, we have now evolved as a powerful, prominent force in the community.

The programs we have initiated are numerous. Before "drug abuse" became a household word we were there with information programs. When the child safety restraint bill was going through the legislature we were there, saw it pass and then began a child safety seat loan program. When child abuse was still a secret we addressed the need and have helped many a child smile again. We raise money for health related scholarships, AMA-ERF and McDowell House. We have founded a Ronald McDonald House, trained babysitters and fingerprinted children. We work in coalition with other volunteer health organizations such as the American Cancer Society and Heart Fund. In coalition we have developed a poster to urge organ donation.

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KMA Cosponsors AIDS Conference

More than 200 people attended the Kentucky Health Professionals AIDS Conference on March 14th in Louisville.

Sponsored by the KMA, the Department for Health Services and the Kentucky Hospital Association, the one-day program included guest speakers from the Centers for Disease Control, the Kentucky Department for Health Services, the University of Kentucky and Indiana University.

Topics covered in the morning program included basic facts and statistics on AIDS in Kentucky, risk of transmission of HTLV-III in the hospitals, use and interpretation of serologic test of the infection and panel discussions.

During the afternoon program, participants divided into groups to listen to speakers from the Kentucky STD Control Program, the Infectious Disease Section of U of L Medical Center and the American Red Cross.

In attendance were pre and post hospital personnel, blood bank personnel, representatives of correctional facilities, physicians and school health nurses. Questionnaires were used to evaluate the conference and to learn of those areas where more information is needed.

John Murphy, M.D., from the Centers for Disease Control, spoke on "Risks of Transmission of HTLV-III in the Hospital setting.

M. Ward Hinds, M.D., MPH, State Epidemiologist, Department for Health Services.

Reginald Finger, M.D., MPH, Communicable Disease Branch Manager, Department for Health Services, was interviewed by local television stations.

16th ANNUAL
Emergency Medical Care Seminar

Executive West Motel June 10, 11, 12, 1986

Sponsored by **Kentucky Medical Association**

Tuesday, June 10, 1986

Morning Session
Theme: *"Sports Injuries"*

8:00 a.m. Registration

MARY ROOM

8:40 a.m. Welcome and Orientation
Opening Remarks
E. Truman Mays, M.D., Chairman, Somerset Emergency Medical Care Committee
Kentucky Medical Association
Moderator: William A. Wetter, III, BS/EMT-P

9:00 a.m. *"Prevention and Recognition of Neurological Sports Related Injuries"*
William H. Brooks, M.D., Lexington

9:20 a.m. *"Sports Eye Injuries"*
Lloyd R. Taustine, M.D., FACS, FAAO, Louisville

9:40 a.m. *"Exposure Injuries Related to the Cold"*
Janet Gren Parker, R.N., M.S., Nashville, Tennessee

10:00 a.m. Coffee Break

10:20 a.m. *"Jogging & Running Injuries"*
Raymond G. Shea, M.D., Louisville

10:40 a.m. *"Heat Injuries"*
R. Quin Bailey, M.D., Danville

11:00 a.m. *"Sports Injuries of the Upper Extremeties"*
Charles H. Veurink, M.D., Richmond

11:20 a.m. *"Sports Injuries of the Lower Extremeties"*
John R. Allen, M.D., Lexington

11:45 a.m. LUNCHEON
GUEST LUNCHEON SPEAKER
"Kentucky Medical Association's Involvement in Kentucky High School Athletics"
R. Quin Bailey, M.D., Danville
Chairman of KMA Committee on School Health, Physical Education and Medical Aspects of Sports

Afternoon Session

2:00 p.m. (Choose one of the following presentations)
1. Workshop Sessions
   Rear Parking Lot
   Louisville Fire Department & Metropolitan Sewer District
   "Cave-ins & Confined Space Extrication"
   Major Larry Atwell, Louisville Fire Dept.
   John Ridge, Safety Coordinator, MSD
2. MARY ROOM
   "Kidney Stones — New Techniques & Treatment"
   (featuring the Lithotriptor)
   John G. Hubbard, M.D., Louisville

3:00 p.m. *"Ice Cream with the Experts"*
(Participants may choose appropriate table.)
Table Discussion Leaders:
1. *"CPR & the Patient in a Stabilization Device"*
   Sharon Abshear, R.N., Lexington
2. *"EMT/Defibrillator Concept & EMT Intermediate"*
   Donald M. Thomas, M.D., Louisville
   Helen Guilford, EMT, Baxter, KY
3. *"Bag Mask Resuscitation Problems"*
   Donna Hunter, R.N., BSN, Lexington
4. *"Commonly Missed Injuries of the Upper Extremity"*
   Graham D. Lister, M.D., Louisville
5. *"Ethical Issues in Emergency Care"*
   Deidra Henley Sanders, R.N., MSN, CEN
6. *"Trauma in the Pregnant Patient"*
   Douglas O. Peeno, M.D., Louisville
7. *"Telephone Triage — Problems & Pitfalls"*
   Richard Bartlett, Director EMS, Louisville
8. *"On Scene Safety for the EMT and Paramedic"*
   Dennis Sullivan, EMT-P, Louisville
   Henry Goodrow, EMT, Louisville

4:15 p.m. Adjournment
4:20 p.m. Open Meeting: Kentucky Emergency Nurses Association
4:20 p.m. Open Meeting: Kentucky Chapter, American College of Emergency Physicians

Wednesday, June 11, 1986

Morning Session
Theme: *"Crisis Intervention"*

8:00 a.m. Registration

MARY ROOM

8:50 a.m. Opening Remarks
Moderator: Barbara Cox, R.N.

9:00 a.m. *"Suicidal Patient in the Field"*
Henry Combs, ACSW, LCSW, Louisville

9:20 a.m. *"Personal Protection from the Violent Patient"*
Brad Learn, EMT-P, Louisville

9:40 a.m. COFFEE BREAK

10:00 a.m. *"Hostage Situations"*
William A. Wetter, III, BS/EMT-P, Louisville

10:20 a.m. *"Child Sexual Abuse"*
Kim Allen, R.N., Louisville
Bonnie Mara, MSSW, Louisville

10:40 a.m. *"Teenage Suicide"*
Shaun McCrea, MSSW, Louisville

11:00 a.m. *"The Elderly Patient"*
Vicky Bradley, R.N., M.S., CEN, Bowling Green

11:20 a.m. *"Commitment Laws — MIW Process"*
Neal Dockal, MSW, MPH, MA, JD, Louisville

11:45 a.m. LUNCHEON
GUEST LUNCHEON SPEAKER
"Suicide"
George R. Nichols, M.D., Louisville
Forensic Pathologist - Kentucky Medical Examiner

Afternoon Session
(Concurrent Sessions)

2:00 p.m. Workshop Sessions (choose two sessions)
1. *"Managing Mass Casualty Situations"*
   Richard Bartlett, Louisville
   Brad Learn, EMT-P, Louisville
2. *"Infection Control"*
   Kim Tharp, R.N., ICN, Louisville
3. *"Application of Hyperbaric Oxygenation in Emergency Situations"*
   Judah L. Skolnick, M.D., Louisville
4. *"Emergency Management of the Poisoned Patient"*
   Mary U. Moore, R.N., Louisville
   Nancy J. Matyunas, Pharm. D., Louisville
5. *"Thoracic Trauma"*
   Janet Gren Parker, R.N., M.S., Nashville

3:00 p.m. DESSERT BREAK & SWITCH SESSIONS
3:20 p.m. Continuation of Workshops
4:15 p.m. Adjournment

Thursday, June 12, 1986

Morning Session

Theme: *"Emergency Medicine on Trial"*

8:00 a.m. Registration

MARY ROOM

8:45 a.m. Opening Remarks
Moderator: Charlotte DeLise, R.N.

9:00 a.m. *"When Can the Patient Say No?"*
Keith McCormick, J.D., EMT-P, Morehead

9:20 a.m. *"How to Prepare for a Deposition"*
Sandy Bennett, J.D., R.N.

9:40 a.m. COFFEE BREAK

10:00 a.m. *"Mock Trial"*
Coordinator: James H. Shewmaker, J.D., EMT-P
Cast of Characters
Jury: The Audience
Plaintiff Attorney: Gary M. Weiss, J.D.
Defense Attorney: Frank P. Doheny, Jr., J.D.
Plaintiff: Mr. Peter Campbell
Defendants —
Doctor: Donald Thomas, M.D.
Nurse: Charlotte DeLise, R.N.
EMT: Mr. Tony Wight
Paramedic: Mr. Jack Boniakowski

11:45 a.m. LUNCHEON
GUEST LUNCHEON SPEAKER
"Artificial Heart Experience"
William C. DeVries, M.D.
Director of Artificial Heart Program,
Humana Heart Institute International

1:20 p.m. Adjournment

Optional Program

1:30 p.m. *"UPDATE: Intravenous Streptokinase & Nitroglycerine Infusion"*
Barbara Gray, R.N., Louisville

3:10 p.m. Adjournment

REGISTRATION

Name _____

Address _____

City _____ St. _____ Zip _____

Please register me as follows:

____ Physician ____ Nurse ____ EMT ____ Paramedic

____ June 10 ____ June 11 ____ June 12

WEDNESDAY, JUNE 11 (Churchill Downs Outing)

Please check if you plan to attend — Cost $25.00

____ An Afternoon and Dinner at Churchill Downs

Advanced **PAID** reservations required (Please enclose check with this registration if you plan to attend outing)

Please complete the following **WEDNESDAY, JUNE 11** (choose **two**)

Please register me for the following two workshop sessions:

Workshop #1 ____

Workshop #2 ____ (only choose two)

Workshop #3 ____

Workshop #4 ____

Workshop #5 ____

Please return registration to:

KENTUCKY MEDICAL ASSOCIATION
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205
(502) 459-9790

FEES

Includes all lunches; workshops; break refreshments; and entrance to exhibits. Churchill Downs registration is separate.

KMA Members, Nurses, EMTs, Paramedics
$25.00 a day

Non-KMA-Member Physicians
$45.00 a day

WEDNESDAY AFTERNOON WORKSHOP

Simultaneous concurrent sessions will be presented. You may choose two of five sessions. First session from 2:00 p.m. to 3:00 p.m., and second session from 3:20 p.m. to 4:15 p.m. Please indicate your choices on the registration form.

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Louisville, KY 40209

(502) 367-2251

Note: Please indicate that you will be attending the Emergency Seminar

PROGRAM CHANGE

WEDNESDAY AFTERNOON ACTIVITIES

The program has been changed this year to include late afternoon races at Churchill Downs and dinner on the Sky Terrace. The cost of the races which begin at 3:30 p.m. and dinner at 6:00 p.m. will be $25. Afternoon concurrent sessions will be going on at the hotel beginning at 2:00 p.m. and concluding at 4:15 p.m. If you choose, you may attend either one or both sessions and still have time to attend most of the races and the dinner. Advance **PAID** reservations must be included with your registration form. No tickets will be available at the seminar for this event. Participants must furnish their own transportation to the Downs. Registration for the Churchill outing is separate from the 3-day seminar fee. (Maps are available to Churchill Downs)

ACCREDITED FOR CONTINUING EDUCATION FOR THE FOLLOWING:

NURSES: This course has been approved by the Kentucky Board of Nursing for Contact Hours. Completion of this course is applicable as a requirement of the Kentucky Board of Nursing in fulfillment of the mandatory educational requirements for relicensure. Objectives for the course content are available on request.

JUNE 10 - 6 CONTACT HOURS — Provider Offering #2-00001-87-002-2-1-5

JUNE 11 (Morning Session) — 4 CONTACT HOURS — Provider Offering #2-00001-87-003-2-1-5

JUNE 11 (2:00 p.m. Session) — 1 CONTACT HOUR — Provider Offering #2-00001-87-004-2-1-5

JUNE 11 (3:00 p.m. Session) — 1 CONTACT HOUR — Provider Offering #2-00001-87-005-2-1-5

JUNE 12 (Morning Session) — 4 CONTACT HOURS — Provider Offering #2-00001-87-007-2-1-5

JUNE 12 (Optional Afternoon Program) — 2 CONTACT HOURS — Provider Offering #2-00001-87-008-2-1-5

PARAMEDICS & EMTS: Continuing education credits will be awarded.

FAMILY PHYSICIANS: Credit has been applied for from the American Academy of Family Physicians.

EMERGENCY PHYSICIANS: Credit has been applied for from the American College of Emergency Physicians for ACEP Category I Credit.

PHYSICIANS: Credit has been applied for under Category I of the AMA Physician's Recognition Award.

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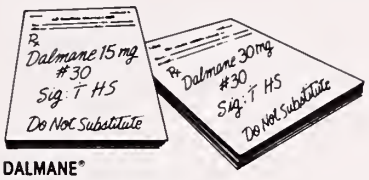

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Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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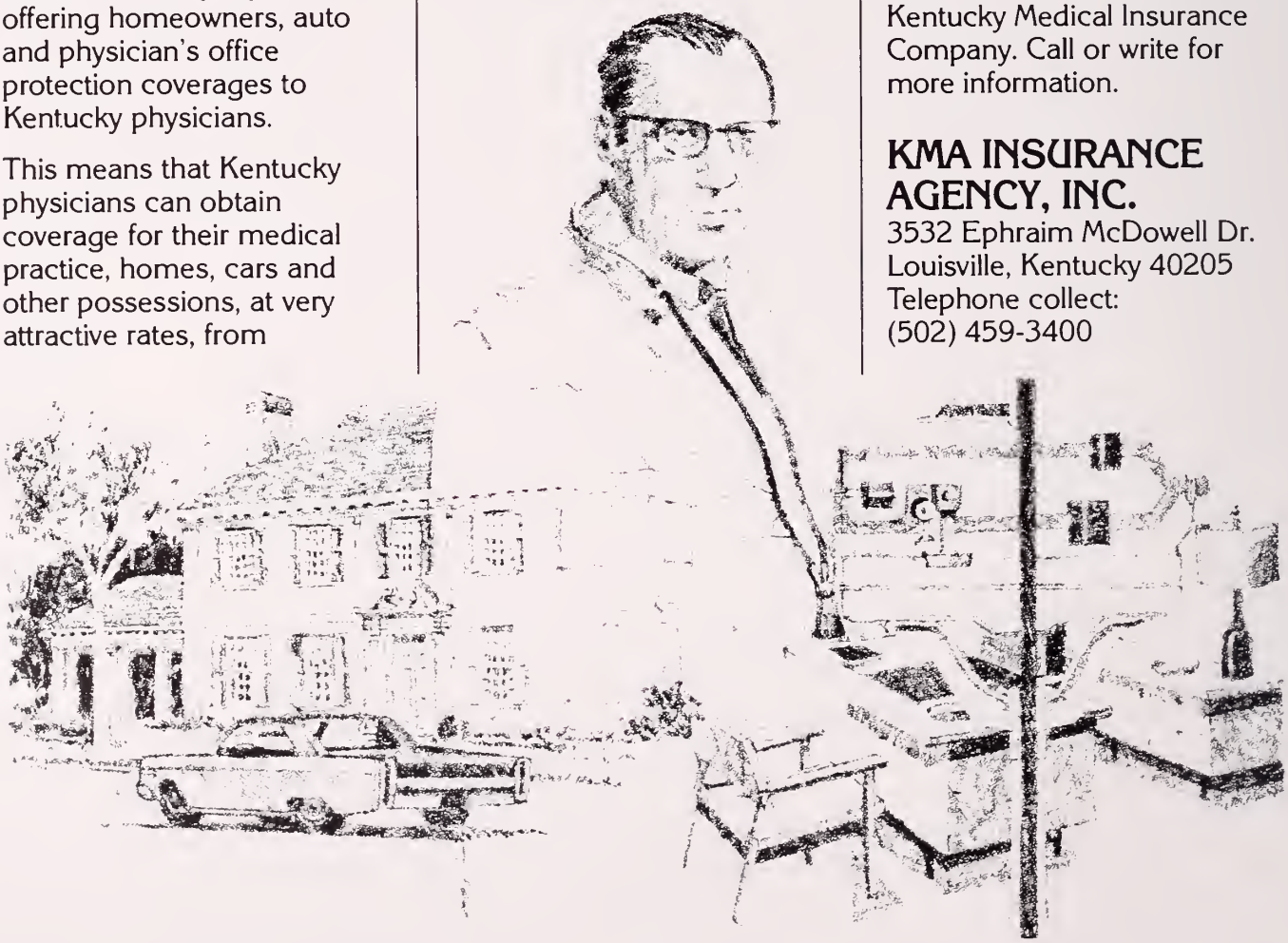

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Life Enhancers, Well Poisoners, and Lawn Mowers

Eric Sevareid, distinguished news commentator, once characterized America as a society composed of life enhancers, well poisoners, and lawn mowers. Life enhancers are "yes I can," positive, bright-side-of-life folks who mobilize readily to combat various ills of society. Well poisoners are the "no, I can't" people who criticize everything and everybody, seeking to bring chaos through negativism. Well poisoners like to poison people and groups with words. Someone recently defined them as "abominable no-men." Lawn mowers live their lives in a vacuum enjoying a patterned like existence oblivious to the events and lives around them. Lawn mowers are routine, back and forth, day after day, year after year people. While the above categorization may be an oversimplification, it in some way mirrors the medical profession.

The life enhancers of medicine cannot continue to carry the well poisoners and lawn mowers as big government's inroads continue. Mandatory physician participation in Medicare on the national level and required Medicaid participation on the state level may not be as far away as you may think. Some states already have similar laws for Medicaid and certain third-party insurance plans. A fractured and declining medical organization bodes ill for our profession, lessening our effectiveness and enhancing governments. The same tactics employed by the British Government through manipulation of the medical profession prior to socialization of medicine is being used by U.S. Government. Some medical groups are subtly promoting separatism and an independent political lobbying effort. Some have gone so far as to propose the formation of a separate and distinct PAC.

Membership in national and state specialty groups augments the profession's economic and political activity. However, we should resist efforts to replace national and state associations (county, KMA-AMA) as the voice or representative of medicine. Groups who promote this philosophy are on a collision course with disaster. Such tactics ultimately serve only to reduce medicine's effectiveness and bring disarray to the political and economic strengths of medicine. Of course, government supports this separatism and occasionally throws a few crumbs our way to reward individual efforts.

Malpractice reform and other legislative victories can only be achieved through involvement by all physicians in a full and open arena. Participation in that arena requires physicians to be members of the county, state, national, and specialty societies. Every physician should be a member of KEMPAC-AMPAC which, ironically, costs a physician less than 28 cents per day or $100 per year. Always remember politician's three major goals. GET ELECTED — GET REELECTED — DON'T GET MAD— GET EVEN. Campaigns cost money and as a State Representative recently told me, "My memory isn't good, but it's long."

The magazine, *Psychology Today*, recently printed an article by John Dailey and Bibb Latane entitled, "When Will People Help In A Crisis." The article pointed out that a bystander will not react in an emergency unless he or she:

1. Notices something happening;
2. Decides this is an emergency;
3. Takes personal responsibility for doing something about it.

Well, the crisis of medicine has been called to your attention. **It's Real—It's Happening,** and our patients and the profession are sustaining real damage.

- Twenty-eight percent of eligible Kentucky physicians are not members of their county and state associations.
- Forty-eight percent of eligible Kentucky physicians are not members of the AMA
- Ninety-one percent of eligible Kentucky physicians are not members of the political arm of medicine.

Incidence of malpractice suits is soaring. Mandatory Medicare and Medicaid and other third-party participation looms on the horizon. Nonphysician-controlled corporate medicine with all of its tentacles is on the upswing. High-risk specialty groups are being forced out of practice. A crisis is occurring.

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Fred C. Rainey, M.D.
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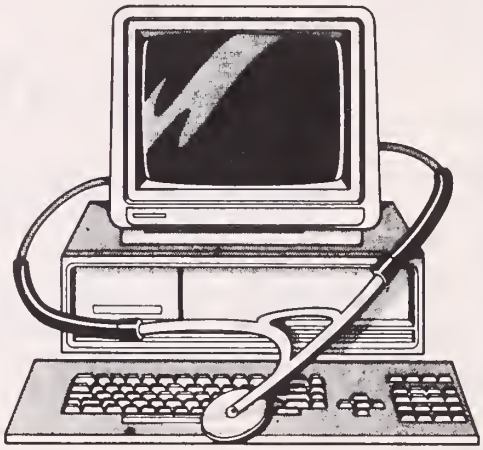

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Heart Transplantation at the Humana Heart Institute International

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(with the coordination of Pamela Elzy, R.N., Kevan Shaheen, R.N.)

Since September, 1984, heart transplantation was performed in seven patients, aged 32 to 54 years, with end-stage cardiac disease. Two transplantations were performed as emergency procedures. The hearts were retrieved from brain-dead donors (aged 16 to 30 years) at distances varying from 0 to 682 miles. The total ischemic time averaged three hours 10 minutes. Initial maintenance immunosuppression included Cyclosporine and corticosteroids (three patients), Cyclosporine and Azathioprine (three patients), Cyclosporine with Azathioprine, anti-thymocyte globulin and corticosteroids (one patient). Postoperative complications included transient renal insufficiency, minor muco-cutaneous herpetic infections and diastolic hypertension. Mild to moderate acute rejection episodes were reversed with steroid pulses and anti-thymocyte globulin. All patients survived and are currently well with a follow-up of one to nine months.

Materials and Methods

Between September 1984 and June 1985, seven orthotopic heart transplantations were performed at the Humana Heart Institute International, in Louisville, Kentucky. All recipients were bedridden, in severe congestive heart failure and dobutamine-dependent; two patients were on a respirator, supported by an intra-aortic balloon pump (transplant status 9) and underwent emergency transplantation. Among other diagnostic studies, the pre-transplant work-up included: ABO and HLA typing, search for auto- or hetero- circulating antibodies, screening for active viral, fungal, bacterial or parasitic infections, renal function evaluation and detection of possible dental or oral infections. Table I summarizes the pertinent preoperative data.

All but one donor hearts were harvested at a distance. The donor work-up was initiated by, and conducted in close collaboration with, the local Organ Procurement Agency (OPA). Information concerning the donor hearts before and immediately after transplantation are presented in Table II. Donor cardiectomy included decompression of the heart immediately before aortic clamping and potassium cardioplegic arrest. The heart was stored in buffered solution at 4°C during transport. Cardiopulmonary by-pass with moderate hypothermia was used for the recipient operation and transplantation followed the principles described by Lower and Sumway.[1]

Initial immunosuppression consisted in: Cyclosporine A (Cy) combined with corticosteroids for the first three patients; Cy combined with Azathioprine (AZA) for the next three patients; Cy with AZA, a short course of Anti-Thymocyte Globulin (ATG)* and low dose cortico steroids for the last patient. Cy was started before transplantation at various doses (6 to 15 mg/kg/po) and given postoperatively to maintain a blood level near 100ng/ml (HPLC-plasma method). Methylprednisolone (mPred) was given to all patients intra-operatively (500mg/iv) and for three doses thereafter (125 mg/q12 hrs/iv).

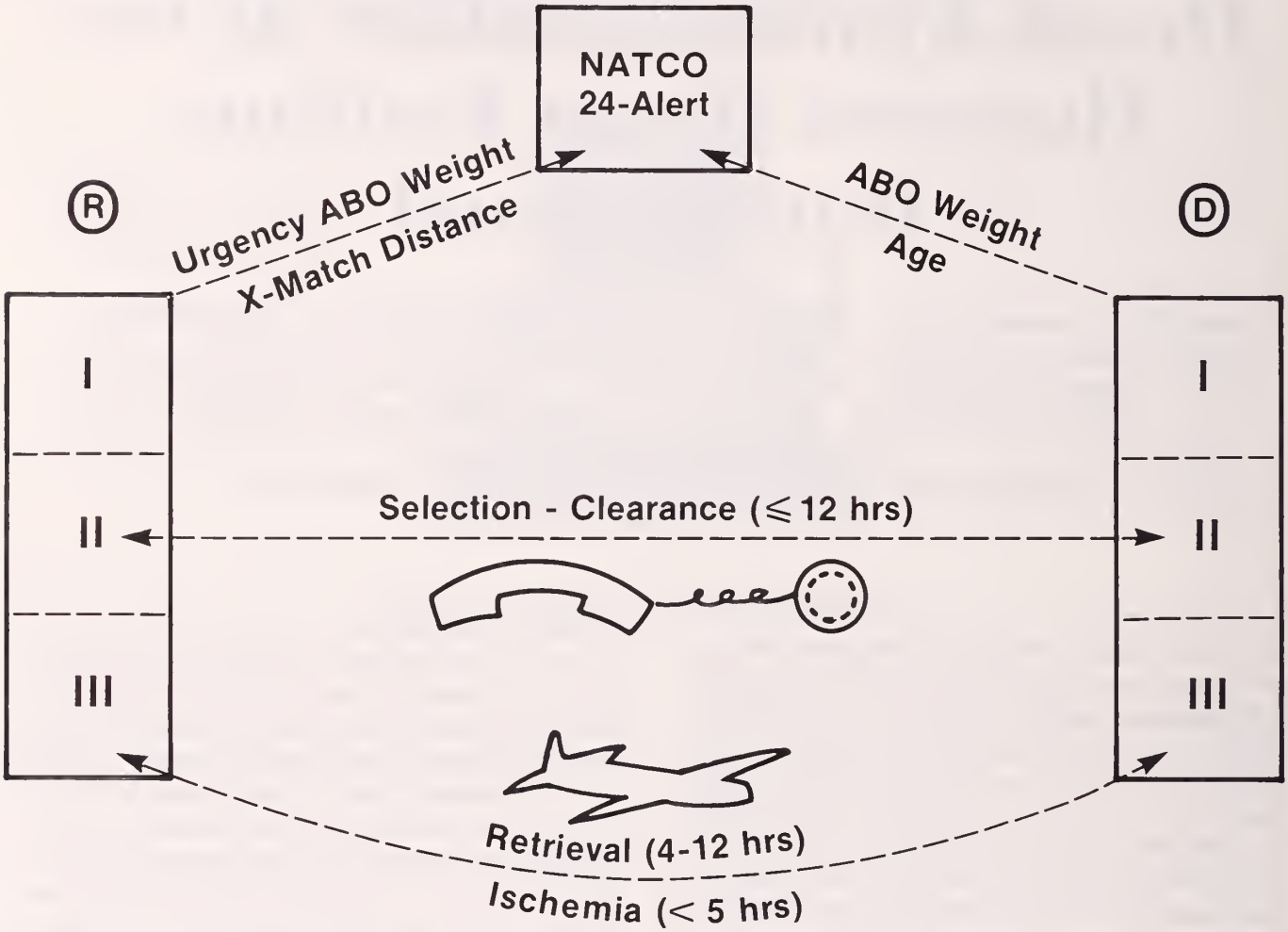

Figure 1. Plan of organization in heart transplantation.

When used early, Prednisone (Pred) was started on the second day after operation (1.5mg/kg/day) and tapered to a maintenance dose of 0.3 to 0.4 mg/kg/day; in the last patient. Pred was started two weeks post-operatively at low dose (0.2 mg/kg/day). In the three patients initially immunosuppressed with Cy and AZA, Pred (1.2 mg/kg tapered to 0.2 to 0 .3 mg/kg/day) was added from 25 to 50 days post-op (averaged 36 days) for treatment of moderate or persistent mild acute rejection. AZA was given preoperatively (2mg/kg/po) and after surgery (0.5 to 1.5 mg/kg/po) unless the white blood count dropped below 4000/mm^3, at which time it was temporarily discontinued. ATG was utilized prophylactically in the last patient and given over the four first postoperative days (15mg/kg/day/iv).

Moderate rejection or persistent episodes of mild rejection were treated with a maximum of two pulses of mPred (1000 mg/day/iv × three days) followed when indicated by ATG (15 mg/kg/day/iv × 3-4 days). Rabbit anti-Thymocyte serum (ATS)** was used for retreatment in one patient who had developed antibodies to horse serum. Endomyocardial biopsy was performed on the fifth to seventh postoperative day, weekly for the next two to three months, and less frequently thereafter.

Reversed isolation was observed in the intensive care unit; mask wear and hand washing were used thereafter. Cardiac rehabilitation was started within two to three weeks after transplantation. Patients from out of town were discharged to a nearby home during the intermediate period of rehabilitation and immunosuppression regulation.

Results

All patients survived and are currently well with a follow-up of one to nine months. Six of them have been discharged and the last one is still recovering in the hospital. Table III outlines some of the parameters describing the patients' postoperative course.

Postoperative transient deterioration of the renal function occurred in five patients. Two of those had

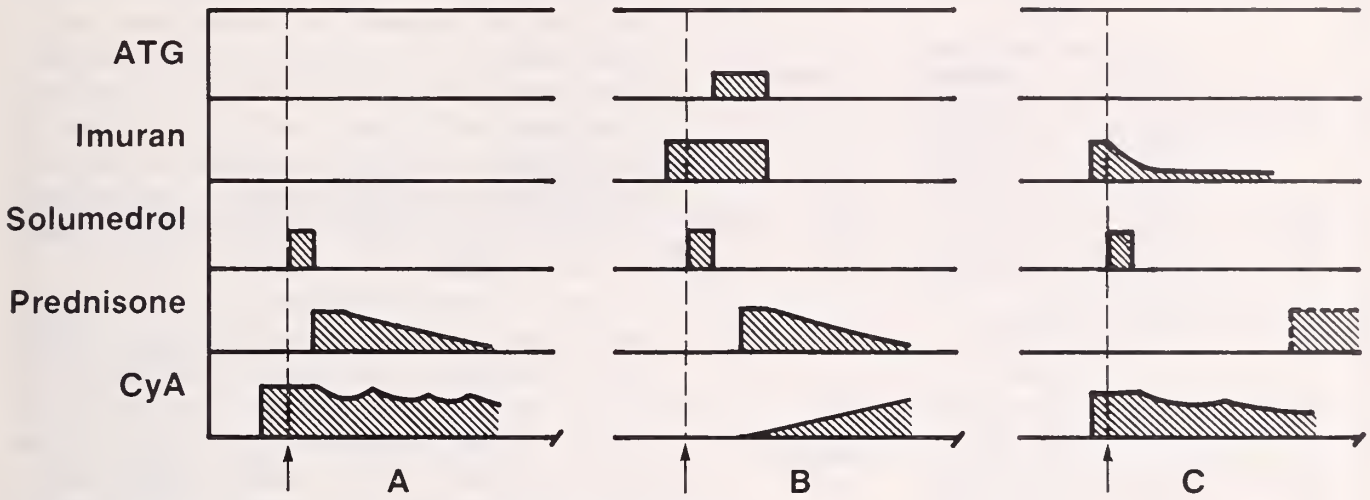

Figure 2. Various protocols for maintenance immunosuppression.
Legend: the time is displayed on the horizontal axis relative to the operation (arrow)
A. Stanford protocol
B. Cabrol protocol
C. Yacoub protocol
CyA - Cyclosporine

renal insufficiency secondary to low cardiac output before transplantation. Peritoneal dialysis for 10 days was needed once. Grand mal seizure occurred in one patient. No major infection was seen. Minor infections consisted in limited herpetic eruption which responded to Acyclovir orally or as ointment. Legionella bacteria was recovered from the pleural aspirate of one patient and his X-ray findings cleared with a short course of Erythromycin. All initial biopsies were normal. Mild rejection occurred in every patient and progressed to moderate in all but one.

Morning diastolic hypertension was seen in most patients and was controlled by a combination of diuretics, peripheral vasodilators or other anti-hypertensive medications. For all patients, the stay in the intensive care unit averaged 8.6 days (range: 6-18) and for the last six patients, the average hospital stay was 45 days (range 35 to 55).

Discussion

Cardiac transplantation is a multi-discipline approach to a complex problem and requires the collaboration of many specialities. Important factors include: the recipient, the donor, their respective operations from organizational and surgical standpoints, the immunosuppression within the context of the postoperative period, and the long-term follow-up.

Recipient selection is critical to the success of the transplantation and deserves utmost attention. Despite involvement of a special committee, the transplant surgeon plays a key role in the selection process and bears the ultimate responsibility for acceptance of the candidates. As guidelines, we followed the criteria mentioned in the literature[2] and presented in Table IV. Heart transplantation can be considered in patients with end-stage cardiac disease, in whom maximal medical treatment is not effective and who are not amenable to other surgical therapy. The survival without transplantation must be limited: with the actual results offered by cardiac transplantation, one is justified to consider this treatment in patients whose survival is less than six to 12 months. Within this period, however, one should not wait until the patient is in extremis, since many patients will die suddenly from arrhythmia while waiting; such deaths could be spared by an earlier transplantation.

The upper age for transplantation remains undefined and from both medical and ethical points of view, it may be, in fact, impossible to set a rigid age limit at this point in time. Two considerations, first the law of supply and demand resulting from the gap between a higher number of waiting candidates and a lower number of available donor hearts, and second, the fact that older recipients are at increased risk because of immunosuppression, have favored recipients younger than 50 years.[3,4,5] However, older patients have been successfully transplanted[6,7,8,9,10]; at present, the fifth decade represents a gray zone in which patients must be individually evaluated.

TABLE I

Recipients' Information

No.	Age	Sex	Diagnosis NYCH	Complicating Factors	Transplant Status
1	47	M	CMP,idio IV	S/P:cardiac arrest S/P:tracheostomy S/P:TV pacer	1
2	32	M	CMP,idio IV	none	1
3	54	M	CIHD IV	S/P:3CGB(1984)	1
4	54	M	CIHD IV	S/P:4CGB S/P:Gastrectomy (1978)	1
5	52	M	CIHD IV	S/P:cardiac arrest S/P:IABP S/P:vent. fib.	9 IABP respirator
6	52	M	CIHD IV	Diabetes (diet)	1
7	47	M	CIHD IV	S/P:Vent. Fib. S/P:IABPx2	9 IABP respirator

LEGEND: CMP, idio = Congestive cardiomyopathy, idiopathic
CIHD = Chronic ischemic heart disease
S/P = Status Post
CBG = Coronary bypass graft
IABP = Intra-aortic balloon pump

Medical contraindications fall under two headings (Table IV): (A) conditions which in themselves carry a limited life expectancy such as extensive peripheral arteriosclerotic vascular disease, any malignancy, and various hematologic, endocrine, metabolic, neurological, or systemic diseases, and (B) conditions which, aggravated by immunosuppression, would increase the postoperative risk, such as peptic ulcer disease, diabetes mellitus, renal or hepatic insufficiency, chronic pulmonary disease or any active or recent infection; contraindications in this last category may change with more flexible immunosuppression. Dental infections must be eradicated before transplantation, even at the cost of total teeth extraction.

A fixed elevated pulmonary vascular resistance above 6 to 8 Woods units is a contradiction to orthotopic transplantation because of possible acute right heart failure in the transplanted heart. Alternatives include heterotopic cardiac transplantation[11] in which the newly implanted heart essentially functions as a left ventricular assist and the native heart as a right ventricle assist, or heart-lung transplantation.

The presence of circulating anti-HLA antibodies, which could lead to hyperacute rejection in the immediate postoperative period, represents an important immunological contraindication.

The psychological profile of transplantation candidates must be evaluated, by a social worker, and in certain instances, by a psychiatrist. Cardiac transplantation places enormous stress on the mental resistance of the patient and his family, and any pre-existing instability, such as psychiatric hospitalization, abnormal behavior, drug addiction, alcoholism, unstable sociofamilial surrounding, might preclude the compliance necessary for long-term treatment.

Donors are selected from brain-dead patients younger than 35 years for males or 40 years for females. Cardiac catheterization may be indicated for older donors. Despite the important role of the OPA in the donor selection, the ultimate responsibility for acceptance of the donor heart rests with the transplant surgeon. Particularly at the onset of a new program, it is important for him to participate first-hand in the various steps of the selection process. This may include the trip to the donor hospital, since complete evaluation of donor heart includes last minutes events taking place at the donor hospital, such as hemodynamic and chemical stability and observation of the heart in situ before excision.

Figure 1 provides a general outline of various steps involved in the organization of a cardiac transplantation. After selection of a candidate in recipient-hospital (R), pertinent data is entered by the local OPA in a national computer and the waiting period starts. At an unrelated time and location, a prospective cardiac donor is identified in donor-hospital (D) and is checked by the local OPA against the panel of recipients stored in the computer. If a match is found, communication between both hospitals is initiated by the donor-hospital OPA after obtaining the proper consents. Further check on the donor suitability is worked out, usually by telephone, between both OPAs and the transplant surgeon. The last step includes flying the transplant team to the donor hospital, removal of the heart, and return to the recipient hospital for the transplantation. The entire process takes 12 to 24 hours.

Surgery for heart transplantation is usually straightforward. Points of importance for the donor's cardiectomy include avoidance of hypotension and hypoxemia: the condition of the heart at the time of excision is critical and probably as important as the duration of ischemia; the upper limit of total ischemia is not defined but good cardiac function can be expected for periods up to five hours. The recipient's operation is technically more difficult in patients having had previous cardiac operations, for example, coronary by-pass surgery.

TABLE II

Donor Heart Data

No.	Age/Sex	Cause of death	Length hospital stay (hrs)	Dopamine (mcg/kg/min × duration)	EKG	Flying distances (miles)	Total ischemic time (warm ischemic time, min)	Inotropic drugs × duration (days)	EKG
1	24/M	MVA	72	6×hrs	SR	682	3h46(49)	Isuprel × 7 days	SR
2	20/M	GSW	31	4×7hrs	SVT, VT Vifib.	73	2h30(43)	Isuprel × 7 days Dobutamine × 3 days Dopamine × 2 days	SR
3	30/M	GSW	12	7×7hrs 12×6hrs	SR	0	2h30(55)	Isuprel × 7 days	SR
4	16/M	MVA	38	10×3hrs 5×4hrs	SR	537	3h55(52)	Isuprel × 7 days	SR
5	25/M	GSW	20	none	SR	309	3h08(52)	Isuprel × 7 days	SR
6	22/M	GSW	12	5×10hrs	SR	524	3h50(58)	Isuprel × 7 days	SR
7	19/M	GSW	42	8-12×42hrs	SR At.Fib.	196	2h35(49)	Isuprel × 7 days	SR

LEGEND: MVA = Motor Vehicle Accident
GSW = Gunshot Wound
SR = Sinus Rhythm

TABLE III

Results

No.	Initial Immuno-Suppres.	Complications (PO Days #:) General	Infection Minor	Rejection	No. postop Months	Status NYCH
1	CY-Pred	None	None	Moderate × 1 (#51)	9.0	home I
2	Cy-Pred	None	Legionella by culture (#6) cutaneous herpes (#46)	Moderate × 2 (#31,60)	7.5	home I
3	Cy-Pred	ATN: PD (#2-12)	None	Mild × 1 (#15)	5.5	home I
4	Cy-AZA	None	Buccal herpes (#72)	Moderate × 1 (#51)	3.5	home I
5	Cy-AZA	Renal Insuff. (#4-11) Seizure (#23)	Herpes Zoster (#37)	Moderate × 1 (#39)	3.0	home I
6	Cy-AZA	None	Buccal herpes (#53)	Moderate × 1 (#26)	2.5	home I
7	Cy-AZA ALG	ATN	None	Moderate × 1 (#15)	1.0	hospital well

LEGEND: Cx = Cyclosporin A
Pred = Prednisone
AZA = Azathioprine
ATG = anti-Thymocyte Globulin

TABLE IV

Indications and Contra-Indications to Heart Transplantation. (See Text)

Indications	Contra-Indications
* End-stage cardiac disease	1) Pre-existing life-limiting conditions
* Not responding medical Rx	B) Pre-existing risk-enhancing conditions
* Deteriorating condition	C) Others:
* Limited survival	– hemodynamic
	– immunological
	– psycho-social

TABLE V

Immunosuppressive drugs used in cardiac transplantation and their most significant side effects

Drugs	Side Effects
Cyclosporine	Renal dysfuncton
	Hypertension
	Tremor
	Hepatotoxicity
Corticosteroid	Diabetes mellitus aggravation
	Sodium retention/Hypertension
	Peptic ulceration
	Secondary infections
Azathioprine	Bone marrow depression
	Secondary infections
Anti-Thymocyte Globulin	Fever, chills, leucopenia, etc.
	Lymphoproliferative lesions/
	Lymphoma

The management of immunosuppression remains a major challenge. Table V presents the medications available and their most significant side effects.

For maintenance immunosuppression, Cy is the most important drug and is used in every patient. Among its side effects, nephrotoxicity with the risk of chronic renal failure,[12] is the most worrisome. Keeping the blood level within a "safe" range should minimize these complications; in our patients, monitoring included measurement of Cy plasma level, BUN, serum creatinine, potassium at frequent intervals, and the Cy dosage was adjusted daily. Diastolic hypertension has not been a major difficulty, nor has tremor been significant. The dangers of steroids are well known; steroids are given under the form of mPred intraoperatively, and as Pred thereafter. In the early postoperative periods, the most important side effects include facilitation of secondary infections and diabetes aggravation; the cushinoid effect is most pronounced in the first three to six months following transplantation and recedes later with dosage reduction. AZA is used in certain protocols; main side effects are bone marrow depression and facilitation of secondary infections; monitoring includes serial white blood count (WBC) determination. AZA-induced leukopenia usually responds to temporary discontinuance of the drug. The role of ATG in maintenance immunosuppression is not yet defined; its most feared complication, lymphoma, seems to occur mainly after prolonged administration; ATG effectiveness is determined by a drop in the count of T-lymphocyte subpopulation.

Some of the protocols available for maintenance immunosuppression are schematically depicted in Figure 2. The standard Stanford regimen,[13] consists of moderate doses of Cy and steroid; side effects such as renal, infectious and diabetogenic can be significant and this regimen has patient limitations. An attractive alternative is presented by Cabrol:[14] it avoids Cy in the perioperative period (when nephrotoxic complications are most pronounced) and relies on a combination of Pred, AZA and ATG; Cy, substituted for AZA, is started at low dose once the patient is hemodynamically stable. A third regimen proposed by Yacoub[10] tries to eliminate Pred altogether; the initial immunosuppression is achieved by Cy and AZA, both in low doses; when used, Pred is added only later and in small dose. Further experience is needed to define the merits and indications of the various protocols.

Immunosuppression for acute rejection is more standardized: treatment is initiated only for acute moderate rejection or for persistent acute mild rejection and usually consists in pulses of mPred followed, when necessary, by ATG. Most rejection episodes seem to occur within the first three months following transplantation. Since some patients build antibodies to the horse ATG initially used, repeat treatment in such patients is conducted with an anti-thymocyte serum prepared in rabbit. Endo-myocardial biopsy remains the ultimate test to detect rejection.

Most recipients are severely debilitated by their long-standing heart disease and require intensive rehabilitation. This is conducted in the cardiac rehabilitation center. In hospital, the patient and his spouse are instructed to record daily, on special forms, the temper-

ature, pulse, blood pressure, weight and medication. After discharge, they send back these forms weekly for completion with appropriate laboratory and medical information. This arrangement places some of the responsibility for follow-up onto the patient and allows for close long-term monitoring. A vital part of the overall treatment is the attention given by the nurse, transplant coordinator, social worker and a patient's family.

Addendum

At the time of publication, all seven patients are home, well and active and in NYHA functional Class I, with a follow-up of 10 to 19 months (mean 14.3).

A total of 16 heart transplantations has been performed. Two patients died. All others are home and in NYHA Class I.

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****Kidney Disease Program University of Louisville***

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****Nashville ATS, Rabbit anti-human thymocyte serum***

Neonatal Care In a Level II Hospital

PATRICK L. JASPER, M.D.

Improved neonatal care in the last 10 years has resulted in a lower neonatal mortality rate in Kentucky. This report documents that improvement as seen in a level II hospital setting in Somerset Kentucky. Survival for infants managed in Somerset was 99.7% for the last 10 years. It was 99.5% whether Somerset managed or transferred. The nursery mortality for Somerset was 6.5/1000 live births in 1975 and zero in 1984. The 10 year neonatal mortality rate was 5.6/1000 live births compared to 8.9 for the state during the same period. The prematurity and stillborn rates for Somerset were lower than those for the state. Of the infant deaths under 28 days of age found in the study, 19.1% had severe and complex birth defects. The cesarean section rate has risen from 10% in 1975 to 20% in 1984. The reasons for the improvement in neonatal survival are discussed and include a greater utilization of prenatal care, increased number of nurses for maternal and infant care, use of fetal monitoring, advent of active infant transport and the increase in available level III neonatal beds.

The care of the pregnant mother and her subsequent newborn has under gone dramatic improvement in the last decade. Improved care has resulted in lower maternal and infant mortality rates throughout the United States as well as in Kentucky. Intermediary hospitals (level II) have contributed to this reduction over the past 10 years. Unfortunately data are not readily available from level II hospitals; that which has been published represents experience in level III hospitals and cannot be compared to level II hospitals. Since the establishment of perinatal regionalization of care in 1979 in Kentucky by the Cabinet for Human Resources, the Somerset community has operated as a level II center. This report documents the improvement in newborn survival as seen in one medical setting in the last 10 years.

Background

The hospital in Somerset has functioned as a referral center for a nine county area in south central Kentucky for many years. The 113-bed Somerset City Hospital provided this service until mid-1976 when the new 175-bed Humana Hospital Lake Cumberland opened. The latter facility contains 28 bassinets and four newborn special care beds. There are five labor rooms and two delivery rooms.

During the study period (1975-1984) all infants were delivered by obstetricians. During that same period, 90% of infants were cared for by pediatricians, the remainder by family practitioners.

Methods

The data for this study was retrieved from daily logs kept in the labor suite and nursery. All deliveries were logged whether stillborn or liveborn. All stillborns were weighed and recorded, some had autopsies. All infants admitted to the nursery with problems, those less than 2500 grams and those transferred for outside care, were recorded. Followup data was obtained for the outcome of all infants transferred. These data were reviewed and summarized on a yearly basis.

All infants greater than 500 grams and all infants, irrespective of the severity of birth defects, were included. Infants that were transferred and expired were included in the statistics for our hospital. Infants born in outside hospitals and referred to Somerset for level II care were excluded from the data. Mortality rates are expressed using the following formulas as promulgated by the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists:[1]

a. Nursery mortality rate (deaths/1000 live births) = deaths of infants > 500 grams in Humana Hospital Lake Cumberland nursery per 1000 live births.

b. perinatal mortality (deaths/1000 deliveries) = fetal deaths > 500 grams + neonatal deaths < 28 days of age (transfers included) × 1000

total number of live births > 500 grams.

TABLE 1
COMPOSITE NEWBORN DATA AT HUMANA HOSPITAL LAKE CUMBERLAND
1975–1984

Year	Deliveries	Stillborns	Live Births	Deaths of Live Births HHLC Managed	Live Births Transferred	Deaths of Transfers	Nursery Mortality*	Perinatal Mortality*	Neonatal Mortality*
1975	1088	15	1073	7	10	3	6.5	22.9	9.3
1976	1087	10	1077	7	10	5	6.5	19.3	10.8
1977	1158	11	1147	7	15	1	6.2	16.4	6.9
1978	1175	3	1172	3	22	6	2.6	10.2	7.7
1979	1167	4	1163	3	24	4	2.6	9.4	6.0
1980	1277	7	1270	3	29	4	2.4	10.9	5.5
1981	1271	3	1268	2	33	3	1.6	6.3	3.9
1982	1317	12	1305	1	30	2	0.7	11.3	2.3
1983	1344	12	1332	4	27	1	3.1	12.6	3.7
1984	1366	9	1357	0	37	2	0	7.3	2.2
Totals	12,250	86	12,164	37	237	31	3.1	12.6	5.6

*Deaths per 1000 Live Births

TABLE 2
INBORNS MANAGED AT HUMANA HOSPITAL LAKE CUMBERLAND
PERCENT SURVIVAL BY WEIGHT
1975–1984

Year/ Weight (GM)	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
◀ 500	—	—	0	—	—	—	—	—	—	—
501–1000	0	75.0	0	—	0	0	0	—	0	—
1001–1500	100	100	100	—	100	100	—	100	100	—
1501–2000	94.1	87.5	81.3	83.7	100	100	100	90.9	100	100
2001–2500	92.7	94.2	100	97.7	97.1	100	100	96.2	100	
							100			
▶ 2501	99.9	100	99.9	99.9	100	100	100	100	100	100
Totals	99.2	99.3	99.4	99.7	99.7	99.8	99.8	99.9	99.7	100

c. neonatal mortality (deaths/1000 live births) = neonatal deaths < 28 days of age (transfers included) × 1000 / total number of live birth > 500 grams.

Results

The composite newborn data for Humana Hospital Lake Cumberland for the last 10 years is presented in Table 1. The 20% increase in deliveries from 1975 to 1984 most likely reflects the increase in population for the service area. It probably also reflects the establishment of prenatal clinics in area health departments as well as a decrease or discontinuation of obstetrical services in some smaller area hospitals. In contrast the live birth rate for Kentucky has been declining for the last 30 years.[3]

Of all infants delivered in our hospital, 1.9% were transferred for level III care (237 of 12,164). Eighty four percent of these were transferred to the University of Kentucky, 12% to the University of Louisville and 4% to other hospitals. Most transfers were by ground transportation, the remainder by helicopter, or fixed wing aircraft. A transferred infant was always accompanied by a physician and a specially trained nurse when a transport team was involved. There were no deaths of infants in transit during the 10-year period.

TABLE 3
INBORNS MANAGED AT HUMANA HOSPITAL
LAKE CUMBERLAND
1975–1984

Weight (GM)	Total	Lived	Died	Survival Rate (%)
◀ 500	1	0	1	0
501–1000	17	1	16	5.9
1001–1500	6	6	0	100
1501–2000	95	87	8	91.5
2001–2500	423	414	9	97.9
▶ 2501	11,385	11,382	3	99.9
Totals	11,927	11,890	37	99.7

TABLE 4

INBORNS TRANSFERRED FROM HUMANA HOSPITAL LAKE CUMBERLAND 1975–1984

Weight (GM)	Total	Lived	Died	Survival Rate %
◀ 500	0	0	0	—
501–1000	9	5	4	55.5
1001–1500	25	22	3	88.0
1501–2000	33	27	6	81.8
2001–2500	52	45	7	86.5
▶ 2501	118	107	11	90.6
Totals	237	206	31	86.9

As illustrated in table 1 the nursery mortality rate has declined from 6.5 in 1975 to zero in 1984, the perinatal mortality rate has been reduced by two-thirds during that period and the neonatal mortality rate by more than three-fourths. In contrast the neonatal mortality rate for Kentucky was 11.6 in 1975 and 8.0 in 1983 (the last available statistic) or a reduction of about one-third.[4] The mortality rates have improved considerably in Somerset during the second five years compared to the first five years:

- nursery mortality rate 4.8 for 1975-1979 compared to 1.6 for 1980-1984
- perinatal mortality rate 15.6 for 1975-1979 compared to 8.7 for 1980-1984
- neonatal mortality rate 8.2 for 1975-1979 compared to 3.4 for 1980-1984

By comparison the neonatal death rate for Kentucky from 1975-1979 was 9.6 and for 1980-1983 it was 8.0[4] Neonatal deaths in Somerset have decreased in the last 5 years also:

- 1975-1979 - 28 deaths
- 1980-1983 - 9 deaths

This represents a 67% reduction in deaths. In Kentucky there were 634 neonatal deaths in 1975 and 436 in 1983, a reduction of 31%.[4] There has also been a reduction of infant deaths after transfer from our hospital:

- 1975-1979 - 19 deaths
- 1980-1984 - 12 deaths

The low birth weight rate (infants < 2500 grams) during this study was 5.4% (661 of 12,164). For the state of Kentucky in 1983 the prematurity rate was 6.9%.[5] The stillborn rate was 6.5/1000 deliveries in Somerset for the last decade. In Kentucky, in 1983, the stillborn rate was 8.7/1000 deliveries and was 10.1 for District 14.[6]

The survival rate for an infant born in Somerset whether transferred or not was 99.5% during the last 10 years. However that rate has improved during the second five years of the study. The rate was 99.2% for 1975-1979 and 99.7% for 1980-1984.

TABLE 5

INBORNS TRANSFERRED FROM HUMANA HOSPITAL LAKE CUMBERLAND 1975–1984

Diagnosis	Total	No. Expired
Hyaline membrane disease	99	14
Pneumonia	24	0
Necrotizing enterocolitis	14	2
Congenital heart disease	12	4
Meconium aspiration	10	1
Hydrocephalus or myelomeningocele	9	0
Seizures	7	0
Persistent fetal circulation	6	1
CNS hemorrhage	6	2
Sepsis	6	1
Diaphragmatic hernia	5	2
GI atresia	4	0
Omphalocele	3	0
Potters syndrome	2	2
Asphyxia neonatorum	2	0
Transient tachypnea	2	0
Tracheoesophageal fistula	2	0
Eventration of diaphragm, Cleft palate, Pulmonary hemorrhage, Gluteal necrosis, Dislocated jaw, Sacrococcoygeal teratoma, Cystic lung, Eye tumor, Incontinentia pigmenti, Hypocalcemia, Hydrothorax, Trigeminy, Fetomaternal transfusion, Stress ulcer, Exstrophy of bladder, Cystic fibrosis, Craniosynotosis, Trisomy, Hemifacial microsomia, CID, Malabsorption, Polycystic kidneys, Hydronephrosis, Hematuria, Meningitis, Abortive SIDS	1 Ea.	2
	237	31

In table 2 survival rates by weight are shown for those infants managed in Somerset. The overall rate for the 10-year period was 99.7%. The survival rate for the last five years was 99.8% (10 deaths in 6376 infants managed). The rate for 1984 for all infants managed was 100% (1321 infants managed).

A breakdown by weight and number of infants per category, managed in Somerset, is illustrated in table 3. Only three infants of 11,385 above 2500 grams expired and all of these were prior to 1979. Of the infants in the 501-1000 gram class, 11 of 16 were under 750 grams, seven of 16 were under 650 grams. The mean duration of life of infants in the 501-1000 gram category was 66.9 minutes, excluding one infant that lived 10 hours. Infants in this weight category were extremely

TABLE 6

INBORNS MANAGED AT HUMANA HOSPITAL LAKE CUMBERLAND THAT EXPIRED 1975–1984

Diagnosis	Number
Hyaline membrane disease	14
Prematurity — severe	8
Asphyxia	7
Anencephaly	3
CNS hemorrage	3
Multiple anomalies	2

premature and were difficult to stabilize and prepare for transport to a level III hospital.

In table 4 infants transferred from our hospital are categorized by weight and survival. The average length of time for a transport team to arrive in Somerset after being called was between two and three hours. The mean age of infants at the time of departure was 5.7 hours. Seventy-one and seven-tenths percent of all infants transferred were over 2000 grams. The overall survival rate for all infants transferred was 86.9%. The survival rate was 73.6% prior to 1979 when no transport teams were available from tertiary centers. Since 1979 when there has been programmatic transporting of sick infants by these centers, the survival rate increased to 92.3%.

Table 5 shows the diagnosis of infants transferred during the last 10 years. The majority of infants had pulmonary problems, either premature infants with hyaline membrane disease or more mature infants with meconium aspiration or congenital pneumonia (133 of 237). Nine of the infants transferred had severe and complex defects (five with congenital heart disease, two with Potter's syndrome, two with multiple anomalies). It is of note that transferred infants who had persistent fetal circulation or necrotizing enterocolitis had an excellent survival rate with only three of 20 infants expiring. Both of these diseases are associated with high mortality rates.[7,8]

The 37 infants that expired in Somerset in the last 10 years are shown by diagnosis in table 6. Four of these infants had severe or multiple birth defects (three with anencephaly, one with multiple anomalies). Thus these four infants along with nine other transferred infants that expired with severe defects, account for 19.1% of the 68 neonatal deaths in this study.

In figure 1 the various mortality rates for the last 10 years are depicted. These are drawn from the data presented in table 1 and show a downward trend in all categories. The rise in the rates for 1983 is primarily because of four nursery deaths at Humana Hospital Lake Cumberland — two infants under 600 grams and two other infants under 2500 grams with hyaline membrane disease, each living less than 90 minutes.

Figure 2 shows the cesarean section rates during the last 10 years. Fetal monitoring which began in our hospital in 1976, is thought to be responsible for an early rise in the rate. Cesarean section for breech presentation, lack of progress in labor and repeat procedure are more recent factors contributing to the rise in the rate. The Somerset cesarean section rate is comparable to a nationwide trend.[10]

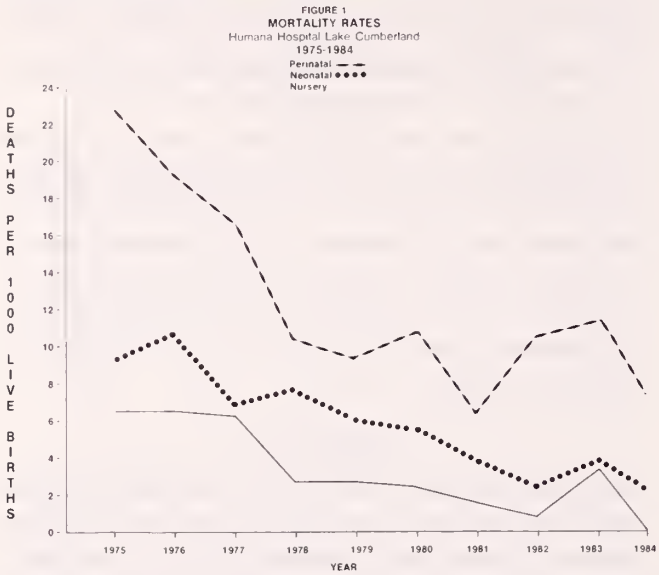
Discussion

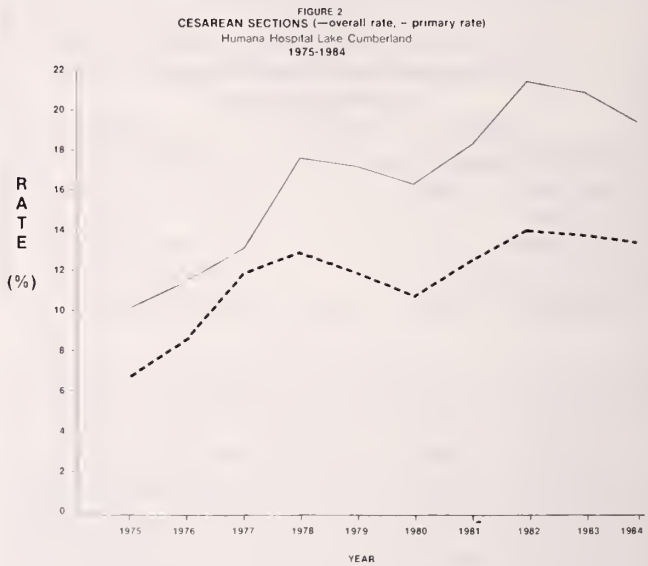
The 1982 census of the District 14 service area (a nine county area of south central Kentucky) was 174,138 while the 1986 census is predicted to be over 204,000.[2] In the 10 years from 1970 to 1980 the population in these nine counties grew by 25.5%. Over 75% of the newborns came from Pulaski, McCreary, and Wayne counties. An additional 20% came from the six surrounding counties of Casey, Clinton, Laurel, Lincoln, Rockcastle, and Russell. One of every 20 patients came from farther away, either from other counties in Kentucky or from out of state (principally Tennessee).

The decline in mortality rates in the Somerset hospital in the last 10 years is multifactorial. The utilization of prenatal care in Kentucky in 1983 was 95.9% of all women having children, in district 14 (the primary Somerset service area) the rate was 98% for the same year.[9] There are more obstetricians in Somerset now (6) than in 1975 and there are more area health department prenatal clinics.

A greater number of registered nurses and licensed practical nurses are now employed in labor and delivery and the nursery than in 1975.

A major factor in the mortality rate decline was the initiation of active transport of infants by the level III hospitals beginning in 1979. We averaged transporting 14 infants per year prior to 1979 and 30 infants per year thereafter. Before the advent of the transport team, infants were transported by local means, *ie.* an ill equipped ambulance with no physician in attendance. A marked increase in survival of the transported infant from 73.6% to 92.3% was noted when transport teams become available. Concommitantly there has been a reduction in mortality rates in Somerset. Since 1979 the Somerset nursery mortality rate has declined from 2.6/1000 live births to zero and the neonatal mortality from six per 1000 live births to 2.2. In contrast the





neonatal mortality in Kentucky has remained at 8/1000 live births during that time.[4]

Another major factor was the opening of a full compliment of neonatal intensive care beds at the University of Kentucky in 1981. In the earlier years of this study there were occasions when no area neonatal intensive care beds were available and the infant who needed transferring had to remain in our nursery. Fortunately, this is no longer necessary.

In the last 18 months of the study (June 1983 through December 1984) no neonatal deaths occurred in Somerset. Undoubtedly, it will be difficult to maintain zero nursery mortality rate and a neonatal mortality of no more than two but this is our goal.

Acknowledgment

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Addendum

Since the preparation of this report the data from our hospital for 1985 has become available. The trends toward improved newborn care have continued. There were 1364 deliveries and five stillborns. There was only one death in our nursery in 1985 (a 3388 gram baby with severe hydrocephalus and a myelomeningocele). There were 37 infants transferred with no deaths in this group. The Cesarean section rate was 23.3%. The nursery mortality rate was 0.7/1000, the perinatal mortality rate 4.4/1000 and the neonatal mortality rate 0.7/1000.

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Cocaine Use in Kentucky

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Inpatient charts of 24 patients discharged from a private psychiatric chemical dependency hospital with a primary diagnosis of Cocaine abuse were reviewed. The average Cocaine abuser was under the age of 35, white, male unemployed, using Cocaine for an average of 5.1 years prior to admission. The number of patients being admitted to Charter Ridge Hospital-Lexington for treatment of Cocaine abuse has risen dramatically in the 28 months studied. Suggestions for the clinical management of Cocaine users are made.

Cocaine is a potent central nervous system stimulant extracted from the Erythroxylon Coca shrub originally found only in the Peruvian and Bolivian Andes. The high demand in the United States for this seductive drug has developed an illicit $30 billion per year industry.

The average cocaine user purchases the drug in graduations of a gram, which usually costs $70 to $120. The most popular way of taking the salt cocaine hydrochloride is by intranasal inhalation in which the user sniffs or snorts thin columns ("lines") of the drug which weigh 25-30 mg. each, with the aid of a straw, a rolled up treasury bill, or a small spoon.[1]

According to The National Household Survey over 21.6 million Americans have tried cocaine,[2] between four and five million are current users.[3] Areas as geographically diverse as New York, Miami Beach, and San Francisco have reported a 300% increase in emergency room overdose deaths between 1980 and 1983.[4] A national 1-800-COCAINE "HELPLINE" reports a two-fold increase in calls from the Southern and Midwestern United States between 1983 and 1985.[5]

In 1985, The U.S. State Department reported an increased cocaine production in South America and an increasingly widespread distribution network in North America and Europe.

Dr. Gold, the founder of the COCAINE "HELPLINE," feels that data obtained from their survey confirms that the use of cocaine in small towns of the South and Midwest is making the cocaine epidemic truly national.[5]

In Kentucky, the Commonwealth Office of Drug Abuse does not collect data about cocaine abuse or dependence. Additionally, most emergency rooms are not collecting data quantifying cocaine related visits. Anecdotal reports from Mental Health Centers and Police Departments in Central and Eastern Kentucky reflect a rapidly increasing rate of cocaine related visits and cocaine related arrests.

At Charter Ridge Hospital in Lexington, we have noted a 300% increase in inpatient admissions of primary cocaine abusing and dependent patients in the period between January 1984 and January 1985. This represents a significant and rapid increase in treatment seeking resulting from increased cocaine dependence in Central and Eastern Kentucky.

Method

The inpatient charts of all individuals admitted between January 1983 and April 1985 with the primary DSM III[6] diagnosis of cocaine abuse (pathological use with impairment of social or occupational functioning for at least one month) were reviewed for demographic and clinical variables that could contribute to the better understanding of cocaine dependence in Kentucky. The search yielded 24 patients with primary cocaine abuse diagnosis. The charts of these 24 patients were reviewed to systematically obtain information on cocaine use, other drug use, treatment history, and drug experience.

Results

Six patients were admitted to Charter Ridge Hospital during the calendar year of 1983 for the treatment of cocaine abuse or dependence. During 1984, cocaine admissions rose by nearly 100% to 11 patients, while seven patients were admitted for cocaine abuse during the first four months of 1985 alone.

As seen in Table III the average cocaine abuser was a young, under 35 years of age, white male, unemployed, from an urban area. Patients spent an average of 23.8 ± 1.7 days in treatment, including one patient

TABLE I

Demographic characteristics of patients admitted for cocaine abuse (n = 24)

Age	28.3 years	
Range	18-56 years	
Sex		
Male		17
Female		7
Race		
White		21
Black		2
Other		1
Marital Status		
Single		8
Married		9
Divorced		7
Occupation		
White Collar		8
Blue Collar		5
Unemployed		11
Community Size		
City		13
Town		5
Rural		5

who left the hospital against medical advice. Two patients were diagnosed as having a schizoid personality, one an attention deficient disorder with hyperactivity and one patient had a passive aggressive disorder. Seven patients had liver dysfunction: four with hepatitis A and/or B, two with alcoholic hepatitis, and one with cirrhosis. Patients had been using cocaine an average of 5.1 ± 1.0 years prior to admission.

No patients used only cocaine as a drug of abuse. Table III shows the incidence of types of drugs of abuse, including those for which there was a concurrent diagnosis of abuse or dependence.

All three routes of cocaine administration were used by the patients. The intranasal route was the most frequently reported and was used by 16 patients, the intravenous route by 10 patients, and free base method by three patients. Some patients reported use of more than one route of administration.

Discussion

This study involved the chart review of cocaine abusing patients in a private psychiatric and chemical dependency hospital in a rural state. National trends indicate increasing use of cocaine.[7] In keeping with this trend, patients being admitted to Charter Ridge-Lexington for treatment of cocaine abuse has risen dramatically in the more than two years studied.

TABLE II

Drug or Drug Class	DSM III Diagnosis of Abuse or Dependence n = 24	Self-Reported Use
Cocaine	23	24
Marijuana	5	20
Amphetamines	4	12
Hallucinogens	–	13
Opiates	4	8
Methaqualone (Quaaludes)	–	12
Barbiturates (Sedatives)	4	8
Anti-Anxiety Drugs	–	13
Alcohol	9	22
Cigarettes	–	14

TABLE III

	Charter Ridge Lexington (n = 24)	Denver, Aspen Helfrich, et al 1983 (n = 136)
Sex		
Male	71%	78%
Age	28.3 years	29 years
Marital Status		
Married	38%	28%
Single	33%	42%
Divorced	29%	23%
Employed	42%	53%*
Route of Administration		
Intranasal	67%	57%
Intravenous	42%	33%
Free-base	12%	10%
Years of Use	5.1	5
Polydrug Use	100%	60%

*Top three social classes of Hollingshead two-factor index of social position.

Helfrich *et al* reported on the epidemiology of 136 cocaine-abusing patients admitted for treatment in Denver and Aspen, an urban community.[8] As seen in Table III, the populations of cocaine-abusing patients do not markedly differ between Lexington, Kentucky and Denver, Colorado. It would appear that cocaine-abusers in Kentucky may be more likely to be unemployed than those elsewhere. A cocaine-abuser in Kentucky may also be more likely to be married than abusers in Colorado. The distribution of routes of cocaine administration are fairly close, particularly in view of the eight out of 24 patients in the present study who reported more than one route of administration.

The most obvious difference between the two studies is the reported number of polydrug users. In this study, any patient who reported use of another drug of abuse, including alcohol and cigarettes, was placed in the po-

lydrug user category. This criterion may not be the same used by other investigators and may have resulted in an artificially high number of polydrug users. However, it is possible that cocaine-abusers in Kentucky in the mid 1980's represent a slightly different population from that reported by Helfrich *et al* and do in fact have a higher percentage of polydrug abusers.

Thus, using a small sample from a private psychiatric and chemical dependency hospital, it would appear that patients admitted for cocaine abuse in Kentucky are very similar to cocaine abusing patients elsewhere in the United States. Further, it would appear that the number of patients admitted for cocaine abuse reflects or exceeds national trends toward increased cocaine use.

Diagnosis and Clinical Management of Cocaine Use

Physicians may encounter three clinical pictures in cocaine users: Acute intoxication, overdose (acute cocaine toxicity), and chronic cocaine use. The "recreational user" usually appears giddy, energetic, talkative, and confident. The effect of cocaine generally lasts for 20-30 minutes then is followed by a "crash" marked by irritability, anxiety, depression, and insomnia. Contrary to popular opinion cocaine overdose may occur by any route of administration, including intranasal. Infrequently, a cocaine overdose may occur in individuals with pseudo-cholinesterase deficiency using only small amounts of cocaine. Patients who have overdosed on cocaine present a psychiatric and/or medical emergency. Conscious patients appear acutely psychotic or manic. They are usually paranoid, panicky, agitated, and grandiose. They may pace around in search for imaginary assailants or become assaultive if they believe they are threatened. Hallucinations of "bugs under my skin," "coke bugs," formication, or flashing lights in the peripheral vision ("snow lights") are common. Cocaine intoxicated patients are also potential suicide risks, particularly if they are having auditory hallucinations, underlying psychiatric illness, or are chronic abusers. With acute cocaine intoxication, there is also a strong potential for seizure. Physical manifestations of cocaine overdose may be life threatening and rapidly progressive. Death is usually due to ventricular fibrillation, or direct toxic effects on the myocardium.[9]

In cases of acute cocaine toxicity, a source of positive pressure ventilation, supplemental oxygen, proper endotracheal equipment, suction, a stretcher which allows Trendelenburg position, intravenous (IV) injection lines, continuous EKG monitor and proper medication are all needed. All drugs should be titrated for clinical need. Diazepam 2.5 - 5.0 mg. may be given intravenously and repeated at five minutes intervals for signs of significant CNS stimulation.[9]

Chronic cocaine toxicity is seen in patients three to 14 days into a binge. Patients commonly display hyperkinetic behavior, tachycardia, hypertension, tachypnea, dyspnea, tics, jerks, tremors, stereotypic movements, distorted perception and, possibly, violent protective behavior which is delusional. Such patients are a prime risk for cardiac arrhythmia, CVA, and high output CHF.[9] In all cases of cocaine toxicity, the use of human contact, reassurance, and a supportive environment are as essential as the medical support.[10]

The most common presentation of cocaine use encountered by physicians is the cocaine abusing or dependent individual. Chronic cocaine abusers or cocaine dependent individuals may not give a history of drug use while seeking treatment for a variety of medical problems: rhinitis, sinus problems, headaches, chronic productive cough (with freebasing), grand mal seizures, hepatitis B, and acquired immune deficiency syndrome (with IV use). All patients suspected of cocaine abuse (seizure of unknown origins or hypertensive crisis) should undergo immediate toxicological screening of blood and urine to confirm the presence of cocaine and its principle metabolite benzoylecogonine, as well as any other drugs taken.

Thin-layer chromatography, enzyme multiplied immunoassay (Emit) and radioimmunoassay are all subject to false positives and, when possible, need to be confirmed by gas or mass spectrometry. The enzyme multiplied immunoassay method for cocaine detection measures the cocaine metabolite benzoylecgonine. Therefore, it is not subject to cross reactivity and consequently adequate for general testing.[11]

After the acute medical complications are resolved, patients must agree to stop all use of cocaine and other mood altering substances, including alcohol and marijuana. Cocaine abuse or dependence does not require a detoxification unless the individual is also dependent on alcohol, a sedative hypnotic, or an opiate. Those who require initial hospitalization include the following:

a. heavy users whose drug compulsion is uncontrollable, particulary heavy freebase or IV users;
b. those with a physical dependency, or other drugs that necessitate a closely supervised pharmacological withdrawal such as heroin, alcohol, or sedative - hypnotics;

c. those with severe medical, psychiatric conditions, or at risk of suicide;
d. those with severely impaired psychosocial functioning; and
e. those who have failed in outpatient treatment.

Those who are highly motivated and have used briefly, may be able to stop on their own. However, most patients require a self help group, a support group or a structured outpatient or inpatient treatment program.

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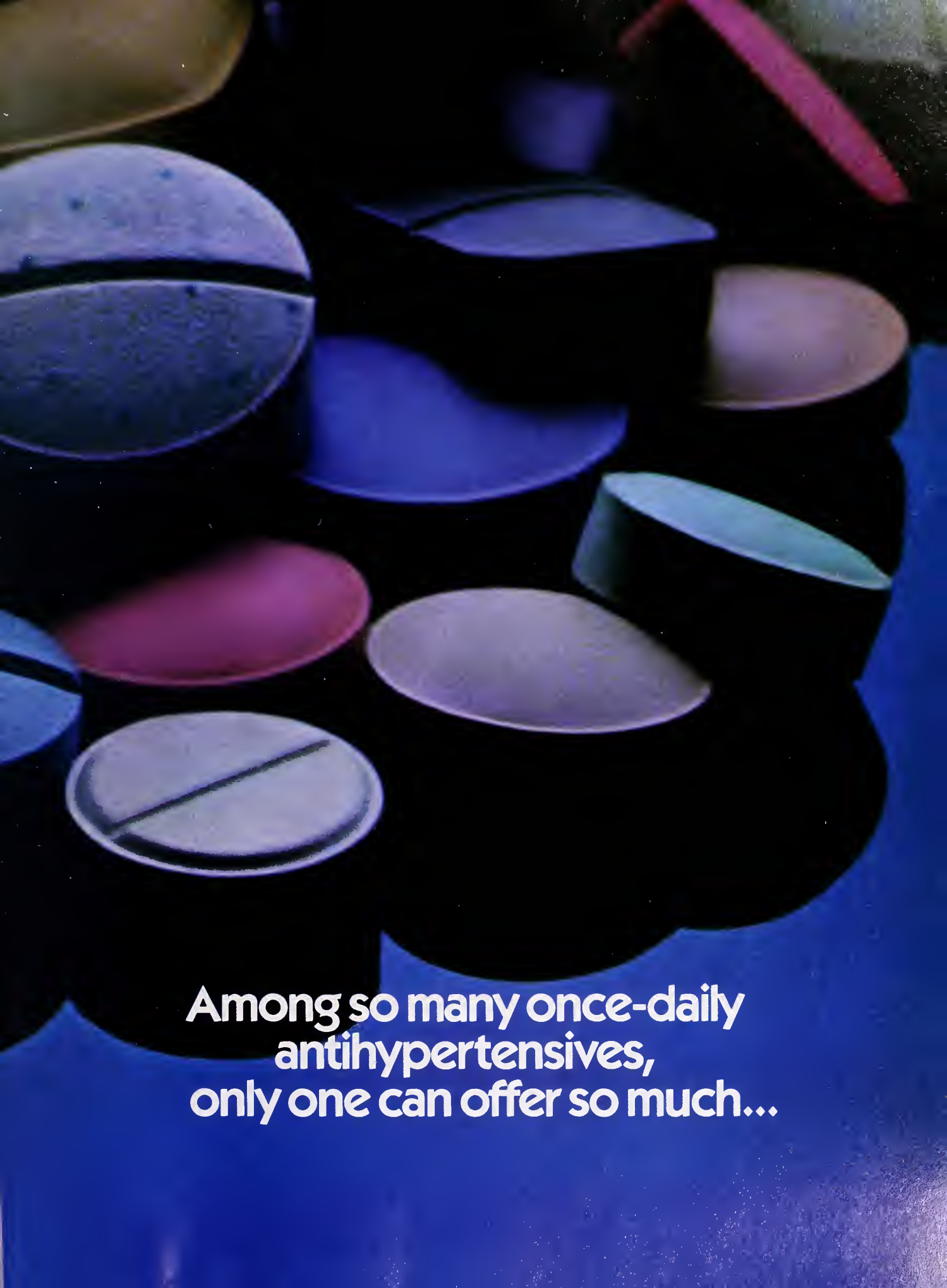
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CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL®):
Propranolol is contraindicated in: 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide:
Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL®):
CARDIAC FAILURE. Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely; or propranolol should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following abrupt discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned, the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patients should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS. Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY. The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide:
Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL®):
GENERAL. Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS. Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS. Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY. Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY. Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS. Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE. Safety and effectiveness in children have not been established.

Hydrochlorothiazide:
GENERAL. Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS. Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY. Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS. Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing.

PEDIATRIC USE. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL®):
Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular. Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System. Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss; emotional lability; slightly clouded sensorium; and decreased performance on neuropsychometrics.

Gastrointestinal. Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis, ischemic colitis.

Allergic. Pharyngitis and agranulocytosis; erythematous rash, fever combined with aching and sore throat; laryngospasm and respiratory distress.

Respiratory. Bronchospasm.

Hematologic. Agranulocytosis; nonthrombocytopenic purpura; thrombocytopenic purpura.

Auto-Immune. In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous. Alopecia; LE-like reactions; psoriasiform rashes; dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

Hydrochlorothiazide:
Gastrointestinal. Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis, sialadenitis.

Central Nervous System. Dizziness, vertigo, paresthesias, headache, xanthopsia.

Hematologic. Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia.

Cardiovascular. Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Hypersensitivity. Purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis, cutaneous vasculitis), fever, respiratory distress, including pneumonitis, anaphylactic reactions.

Other. Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness, transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

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So we do not lose heart. Though our outer nature is wasting away, our inner nature is being renewed every day. For this slight momentary affliction is preparing for us an eternal weight of glory beyond all comparison, because we look not to the things that are seen but to the things that are unseen; for the things that are seen are transient, but the things that are unseen are eternal.

For we know that if the earthly tent we live in is destroyed, we have a building from God, a house not made with hands, eternal in the heavens.

II Corinthians 4:16–5:1

A rich and mighty Persian once walked in his garden with one of his servants. The servant cried that he had just encountered Death, who had threatened him. He begged his master to give him his fastest horse so that he could make haste and flee to Teheran, which he could reach that same evening. The master consented and the servant galloped off on the horse. On returning to his house the master himself met Death, and questioned him, "Why did you terrify and threaten my servant?" "I did not threaten him; I only showed surprise in still finding him here when I planned to meet him tonight in Teheran," said Death.

Man's Search for Meaning
Viktor E. Frankl

Control

The patient wants two opinions and yet a third about the proper course of treatment for her breast mass. The middle age executive describes his lifestyle as one of "giving ulcers not getting them." The anxious (guilty?) child of the elderly parent wants "everything done." The young lady eats nothing but natural foods and takes megavitamins to "take care of my body."

There is a laudable element in each of the descriptions. However, implicit in their approach is the premise that control of their physical destiny is not only possible, but if one only tried hard enough, a fait accompli.

The patient with the breast mass already has distant metastasis as well as 7/15 axillary lymph nodes positive for cancer. She dies in four years of widespread metastasis. The executive drops dead in the airport hurrying to a plane. The elderly parent is put on the respirator and a dignified death becomes an agonizing ordeal for both patient and family. The young lady marries later, has a first pregnancy over age 35 and delivers a child with Downs Syndrome.

Control of our physical destiny is largely an illusion. Granted it is an illusion to which we in the 20th century cling desperately. But it remains an illusion.

I am increasingly reminded how limited my armatarium really is. The successes are in prevention rather than cure. Smallpox, polio, cessation of smoking, abstinence from alcohol are examples. Antibiotics prevent death from sepsis, but usually do less than we expect in many areas.

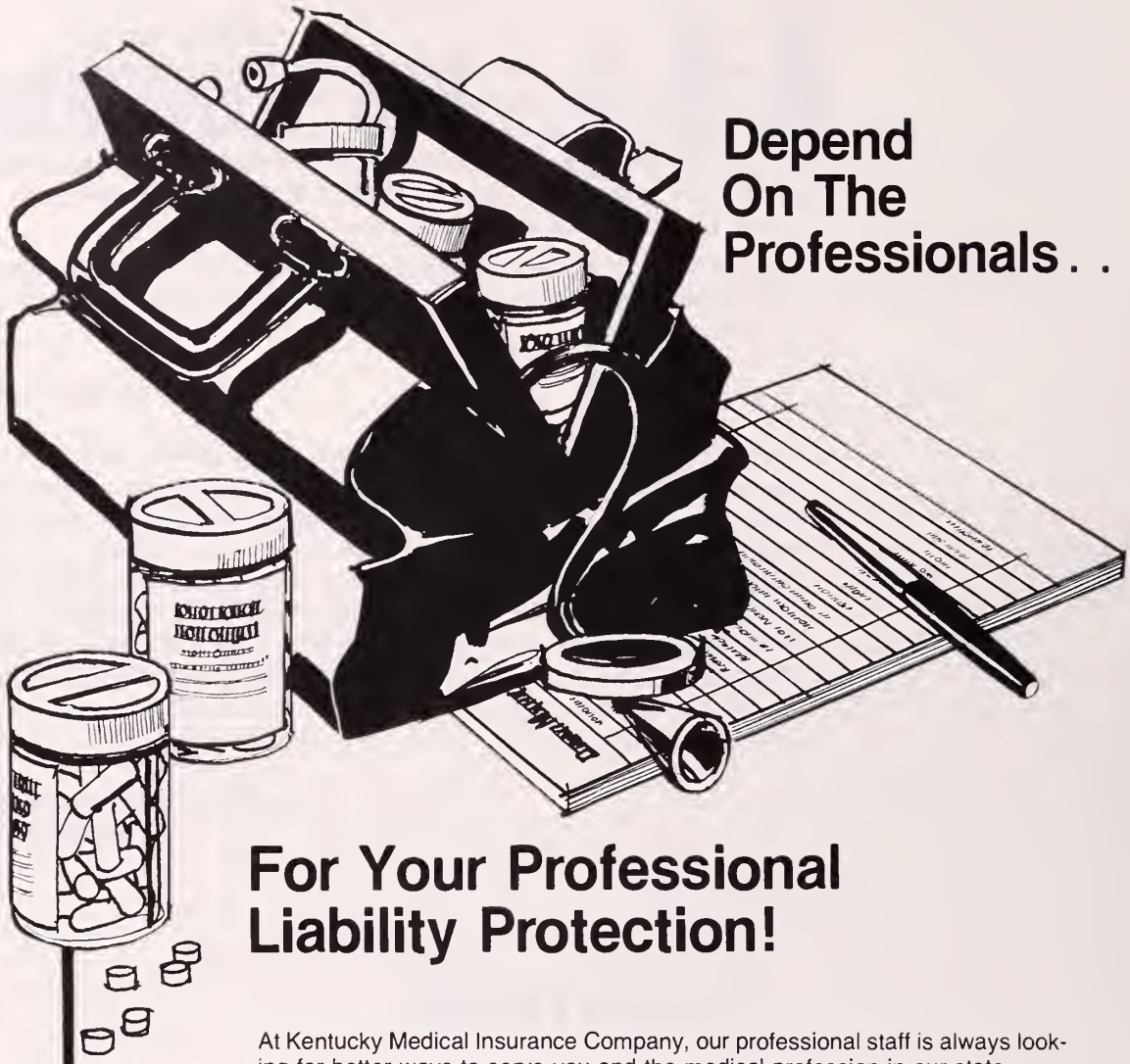
If control is limited, what then can we as physicians do?

We can make the crisis time of each patient a little easier. We can practice good medicine and in so doing we can realize our own limitation and be honest with the patient in limiting his expectation if such is needed.

And finally when death comes for the patient, we can be strong enough to be supportive without frantically applying the latest technique to sustain life beyond the natural limit.

The decision as to when that time has come is not always easy, but more often then not it is clear to patient, family and doctor. Let us have the courage to accept it — in the best interest of the patient.

Paul C. Grider, Jr.



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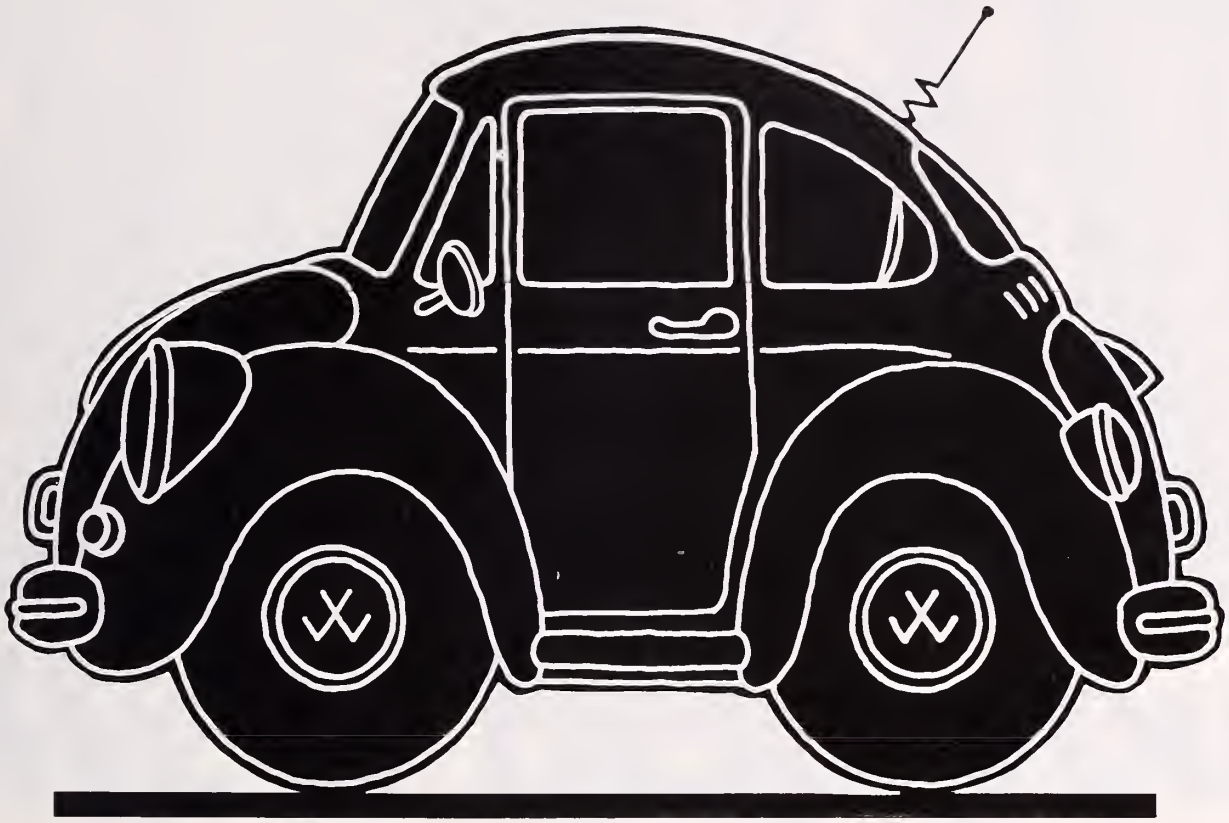

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Learning to Live with Hypertension

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Medicine In The Public Interest is a non-profit organization supporting research and education in medicine, science and society. Under its editorship this publication was developed to be distributed to the interested public. Sponsored at this point by Pfizer Chemicals, the dissemination of the book through physician intermediaries has been made possible.

For the reader confronted with hypertension and his supporting case of family and friends, this information is readable through some 76 legibly printed pages. Basic definitions first, diagnostic methods, the diet, drugs and appendices make the book flow evenly. Words are simple yet the medical jargon is highlighted but quickly distilled into layman language.

Numerous quotations from patient identified by first name and last initial breakup what would be a very flowing test. These should be excised.

That all of us wish for some control of our destiny is to give impact to detailed diet sections, complete with sodium statistics. Common and less common drugs are listed, preceded by general introduction to diuretics (thiazide and loop), sympatholytics, vasocilators and converting enzyme inhibitors.

If you feel comfortable with this type of patient education, this booklet will be useful.

Stephen Z. Smith, M.D.
Assistant Scientific Editor

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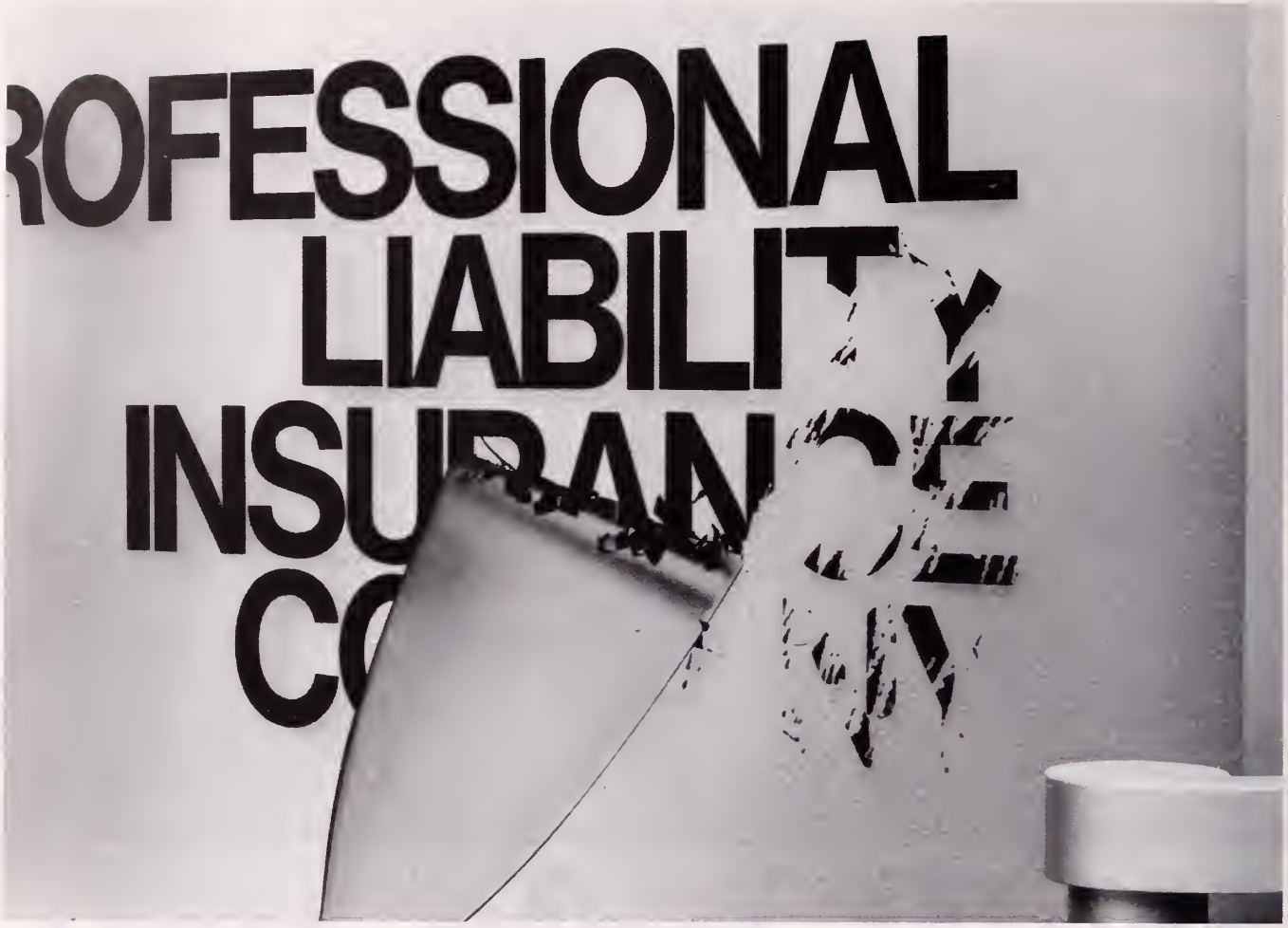

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Building A Medical Practice

. . . through marketing. Actually, if we had included those two words in the title of the article, a number of readers would have automatically turned the page. For some physicians still view "marketing" in terms of advertising and promotion.

Yet marketing is much more. It is a **whole** philosophy of looking at your practice in terms of what services it provides and matching those services with what your patients need. Marketing is a comprehensive and professional approach to building a practice, not a now and then activity.

Roger Blackwell, Ph.D., of Ohio State University's Marketing Department, maintains that good marketing and good medicine have long gone hand in hand. He notes that "what used to be called good bedside manner is now called marketing." The climate of trust and concern that the physician of yesterday was able to build through involvement in the community and personal contact with his patients is an example of marketing at its best.

Marketing is taking place **naturally** . . . whenever a doctor provides quality care and shows concern for the patient . . . when staff members make patients feel welcome and at ease . . . when an office manager keeps everything running on schedule. **Formal** marketing, although a little more time-consuming, can be just as natural as long as you have an overall plan to reach your objectives.

The first step in formulating a marketing plan is to evaluate the current situation to identify strengths and weaknesses, opportunities and challenges. As a physician, you've been trained to gather facts in exacting detail about disease and treatment. Market research utilizes similar techniques in gathering and digesting pertinent information about various aspects of your practice.

You may wish to use the following questions personally or in a brainstorming session with your staff to help you in determining overall goals for your practice.

What is the present state of health of your practice?

Internal Assessment

Patient mix – What types of patients make up your practice?
By age? occupation? location? illness?
Are there other types of patients you would like to see?
Is your patient volume increasing/decreasing?
Look at numbers of new patients, patient transfers.
Which is higher?

Services – What services do you now provide?
Do your patients know you provide all these services?
Are there other services you would like to provide?
What type of patient could benefit from those new services?
Are there services you would like to drop?
What type of patient would be affected if you dropped a particular service?

Referrals – How do most of your patients learn of your practice?
Do you rely on physician referrals? If so, are these referrals increasing/decreasing?

Facilities – Is your office conveniently located *for patients*?
Is parking adequate? What could improve it?
Is office space adequate for current load? Can it handle an increase in patients? staff?
Can the office layout be improved for efficiency?
Would YOU be comfortable waiting in the reception room? the examining room?
What equipment would be needed to provide new services or increase patient volume?
What equipment is now underutilized?

External Assessment

Competition – If feasible, list the primary care and specialty practices in your area.
Are new practices opening in your area?

Have any new primary-care or emergency centers recently opened?

Where have you been sending records for patient transfers?

What services are nonphysician specialists offering? (i.e., wellness centers, exercise clubs, nutritionists)

What health plans — HMO, IPA or PPO — are currently in the area? Are you a member of any?

How much choice do people in your community really have in choosing a doctor?

Demographics – Where is the population moving?

How is age distributed in the area? (i.e., young families mean pediatric, OB/GYN care; older populations may mean more arthritis and heart problems.)

What are the economic trends for the area?

Is business moving in or out?

If you are interested in doing a detailed demographic survey of your practice area, KMA can provide you with a sample survey form as well as a list of resources. You might also wish to consider hiring a business major from a local college to assist your office in this task. Although you can't control the external factors in the assessment of your practice, the data you gather will play a major role in developing your marketing plan.

The Next Step

The information you've obtained from the above questions should give you an accurate picture of where your practice currently stands. Before you can go any further, however, you must define what you want, personally and professionally, from your practice.

Setting personal goals involves assessing your needs in regard to time, finances and retirement. What do you want from the practice of medicine? — More income? More patients? Assurance of a progressive growth in patient load? Financial advisers, family members and partners are sources to consult in this step.

Because professional goals directly affect practice plans, you should also consider how much time you want or need to spend in things other than direct patient care — continuing education, teaching, organizational and other non-medical activities.

Keeping your personal and professional goals in mind, you can now define growth and management objectives in your practice. These objectives can be helpful not only in building your practice, but in shaping it.

How many patients are you willing to see each day?

Are you satisfied with your current patient mix? If not, what kind of patients do you want to attract?

Can your practice be improved through better practice management? (ie. scheduling, collections, accounting, telephone usage)

Can your patient relationships be improved?

How can you maximize the capabilities of your staff?

Should you expand your services? your staff? Add another physician?

Setting goals and assessing where you are is not an easy task. However, this is the benchmark data needed to improve and build your medical practice.

Resources used in preparing this article may be helpful to you for further reference:

AMA Department of Practice Management

Marketing Strategies for Physicians, Stephen W. Brown, Ph.D. & Andrew P. Morley, Jr., M.D., Medical Economics Books, 1986.

The Doctor's Office, monthly newsletter, 1958 Charter Lane, Lancaster, PA 17601.

Requests for sample survey forms for either the demographic analysis or the physician self-assessment should be directed to KMA Member Services, 3532 Ephraim McDowell Drive, Louisville, KY 40205 or call Diane Maxey at KMA, (502) 459-9790.

Motrin® 800 mg TABLETS

ibuprofen

Extra strength
Convenience
Economy

Upjohn

A Century of Caring
1886·1986

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J-6138 January 1986

"High blood pressure should be a red flag to screen for cholesterol..."[1]

Wyeth Laboratories
Philadelphia, PA 19101

If your patients have hypertension, they probably have high cholesterol too.

The Framingham Heart Study[2] showed that over two thirds of the 35 and older population in that study with systolic blood pressures over 145 mmHg also had serum cholesterol levels of 225 mg/dL or more, and 46% had levels above 250 mg/dL.

While many clinical laboratories still report 250 mg/dL as "normal" cholesterol, the NIH Consensus Development Conference Statement on Cholesterol and Heart Disease[3] stated that any level above 220 mg/dL is associated with a significantly increased risk of coronary heart disease.

You need to know, because high cholesterol parallels high blood pressure as a CHD risk factor.

Epidemiological studies and large-scale prevention trials have indicated that as with blood pressure, serum cholesterol levels are proportionately related to CHD risk.

Specifically, *"...for every 10 mmHg rise in pressure, there appears to be about a 30% rise in cardiovascular risk."*[4] *"...for every one percent you go up the American cholesterol scale, your subsequent rate of heart attack rises two to three percent."*[5]

And although the specific impact on CHD has not been determined, we know that many of the principal agents used to lower blood pressure actually increase cholesterol.

Wytensin® lowers blood pressure effectively without raising cholesterol.

While Wytensin is not a cholesterol-lowering agent and is not indicated for the treatment of hyperlipidemia, in controlled clinical trials[6] it caused a slight, sustained decrease in total cholesterol without reducing the HDL fraction or altering serum triglycerides.

At the same time, Wytensin lowered blood pressure as effectively as hydrochlorothiazide, propranolol, clonidine or methyldopa. Drowsiness and/or dry mouth, the most frequent side effects noted with Wytensin, usually diminish or disappear over time. In fact, in double-blind studies to date, discontinuance of therapy for all side effects occurred in about 13% of patients.

WyTensin®
(guanabenz acetate)

Antihypertensive therapy that does not increase cholesterol

See important information on following page.

References: 1. Glueck CJ: Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*, Washington, D.C., March 31, 1985. 2. *The Framingham Study, An epidemiological investigation of cardiovascular disease*, Section 28, U.S. Dept. of Health, Education, and Welfare. 3. National Institutes of Health Consensus Development Conference Statement, 1984: Vol 5, No 7, p 4. 4. Chobanian AV: The influence of hypertension and other hemodynamic factors in atheroganesis. *Progress in Cardiovascular Diseases, XXVI* (3): 177, Nov/Dec, 1983. 5. Castelli WP: Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*, Washington, D.C., March 31, 1985. 6. Data on file, Wyeth Laboratories.

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WyTensin®
(guanabenz acetate)

Antihypertensive therapy that does not increase cholesterol

Brief Summary

Before prescribing, consult the complete package circular.

Indications and Usage: Treatment of hypertension, alone or in combination with a thiazide diuretic

Contraindication: Known sensitivity to the drug

Precautions: 1. Sedation: Causes sedation or drowsiness in a large fraction of patients. When used with centrally active depressants, e.g., phenothiazines, barbiturates and benzodiazepines, consider potential for additive sedative effects. 2. Patients with vascular insufficiency: Like other antihypertensives use with caution in severe coronary insufficiency, recent myocardial infarction, cerebrovascular disease, or severe hepatic or renal failure. 3. Rebound: Sudden cessation of therapy with central alpha agonists like **Wytensin** may rarely result in "overshoot" hypertension and more commonly produces increase in serum catecholamines and subjective symptomatology.

INFORMATION FOR PATIENTS: Advise patients on **Wytensin** to exercise caution when operating dangerous machinery or motor vehicles until it is determined they do not become drowsy or dizzy. Warn patients that tolerance for alcohol and other CNS depressants may be diminished. Advise patients not to discontinue therapy abruptly.

LAB TESTS: In clinical trials, no clinically significant lab test abnormalities were identified during acute or chronic therapy. Tests included CBC, urinalysis, electrolytes, SGOT, bilirubin, alkaline phosphatase, uric acid, BUN, creatinine, glucose, calcium, phosphorus, total protein, and Coombs' test. During long-term use there was small decrease in serum cholesterol and total triglycerides without change in high-density lipoprotein fraction. In rare instances occasional nonprogressive increase in liver enzymes was observed, but no clinical evidence of hepatic disease.

DRUG INTERACTIONS: **Wytensin** was not demonstrated to cause drug interactions when given with other drugs, e.g., digitalis, diuretics, analgesics, anxiolytics, and antiinflammatory or antiinfective agents, in clinical trials. However, potential for increased sedation when given concomitantly with CNS depressants should be noted.

DRUG/LAB TEST INTERACTIONS: No lab test abnormalities were identified with **Wytensin** use.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: No evidence of carcinogenic potential emerged in rats during a two-year oral study with **Wytensin** at up to 9.5 mg/kg/day, i.e., about 10 times maximum recommended human dose. In the Salmonella microsome mutagenicity (Ames) test system, **Wytensin** at 200-500 mcg per plate or at 30-50 mcg/ml in suspension gave dose-related increases in number of mutants in one (TA 1537) of five *Salmonella typhimurium* strains with or without inclusion of rat liver microsomes. No mutagenic activity was seen at doses up to those which inhibit growth in the eukaryotic microorganism, *Schizosaccharomyces pombe*, or in Chinese hamster ovary cells at doses up to those lethal to the cells in culture. In another eukaryotic system, *Saccharomyces cerevisiae*, **Wytensin** produced no activity in an assay measuring induction of repairable DNA damage. Reproductive studies showed a decreased pregnancy rate in rats given high oral doses (9.6 mg/kg), suggesting impairment of fertility. Fertility of treated males (9.6 mg/kg) may also have been affected, as suggested by decreased pregnancy rate of mates, even though females received drug only during last third of pregnancy.

PREGNANCY: Pregnancy Category C. WYTENSIN® MAY HAVE ADVERSE EFFECTS ON FETUS WHEN ADMINISTERED TO PREGNANT WOMEN. A teratology study in mice indicated possible increase in skeletal abnormalities when **Wytensin** is given orally at doses 3 to 6 times maximum recommended human dose of 1.0 mg/kg. These abnormalities, principally costal and vertebral, were not noted in similar studies in rats and rabbits. However, increased fetal loss has been observed after oral **Wytensin** given to pregnant rats (14 mg/kg) and rabbits (20 mg/kg). Reproductive studies in rats have shown slightly decreased live-birth indices, decreased fetal survival rate, and decreased pup body weight at oral doses of 6.4 and 9.6 mg/kg. There are no adequate, well-controlled studies in pregnant women. **Wytensin** should be used during pregnancy only if potential benefit justifies potential risk to fetus.

NURSING MOTHERS: Because no information is available on **Wytensin** excretion in human milk, it should not be given to nursing mothers.

PEDIATRIC USE: Safety and effectiveness in children less than 12 years of age have not been demonstrated; use in this age group cannot be recommended.

Adverse Reactions: Incidence of adverse effects was ascertained from controlled clinical studies in U.S. and is based on data from 859 patients on **Wytensin** for up to 3 years. There is some evidence that side effects are dose-related. Following table shows incidence of adverse effects in at least 5% of patients in study comparing **Wytensin** to placebo, at starting dose of 8 mg b.i.d.

Adverse Effect	Placebo (%) n = 102	**Wytensin** (%) n = 109
Dry mouth	7	28
Drowsiness or sedation	12	39
Dizziness	7	17
Weakness	7	10
Headache	6	5

In other controlled clinical trials at starting dose of 16 mg/day in 476 patients, incidence of dry mouth was slightly higher (38%) and dizziness was slightly lower (12%), but incidence of most frequent adverse effects was similar to placebo-controlled trial. Although these side effects were not serious, they led to discontinuation of treatment about 15% of the time. In more recent studies using an initial dose of 8 mg/day in 274 patients, incidence of drowsiness or sedation was lower, about 20%. Other adverse effects reported during clinical trials but not clearly distinguishable from placebo effects and occurring with frequency of 3% or less: Cardiovascular—chest pain, edema, arrhythmias, palpitations. Gastrointestinal—nausea, epigastric pain, diarrhea, vomiting, constipation, abdominal discomfort. Central nervous system—anxiety, ataxia, depression, sleep disturbances. ENT disorders—nasal congestion. Eye disorders—blurring of vision. Musculoskeletal—aches in extremities, muscle aches. Respiratory—dyspnea. Dermatologic—rash, pruritus. Urogenital—urinary frequency, disturbances of sexual function. Other—gynecomastia, taste disorders.

Drug Abuse and Dependence: No dependence or abuse has been reported.

Overdosage: Accidental ingestion caused hypotension, somnolence, lethargy, irritability, miosis, and bradycardia in two children aged one and three years. Gastric lavage and pressor substances, fluids, and oral activated charcoal resulted in complete and uneventful recovery within 12 hours in both. Since experience with accidental overdosage is limited, suggested treatment is mainly supportive while drug is being eliminated and until patient is no longer symptomatic. Vital signs and fluid balance should be carefully monitored. Adequate airway should be maintained and, if indicated, assisted respiration instituted. No data are available on **Wytensin** dialyzability.

Dosage and Administration: Individualize dosage. A starting dose of 4 mg b.i.d. is recommended, whether used alone or with a thiazide diuretic. Dosage may be increased in increments of 4 to 8 mg/day every one to two weeks, depending on response. Maximum dose studied has been 32 mg b.i.d., but doses this high are rarely needed.

How Supplied: (guanabenz acetate) Tablets, 4 mg, bottles of 100 and 500; 8 mg and 16 mg, bottles of 100.

Revised 2/14/85

Wyeth Laboratories
Philadelphia, Pa. 19101

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Ad Council

TWELVE IMPECCABLE EXCUSES FOR NOT GIVING BLOOD.

"1. I think I have lumbago.
2. I'm type Z negative.
3. I'm on the grapefruit diet.
4. I gave six months ago.
5. I just got back from Monaco.
6. The lines are thirteen blocks long.
7. My mother won't let me.
8. I didn't sign up.
9. I'm going out of town.
10. Asthma runs in my family.
11. I forgot to eat this morning.
12. I'm allergic to flowering magnolia."

Each one's a doozy, but we're hoping you won't use any of them. Give blood through the American Red Cross. Please, don't chicken out.

EXCUSES DON'T SAVE LIVES. BLOOD DOES.

American Red Cross

Tear-out Pages for Office Use

Preadmission Review Reference List

At the 1985 KMA Annual Meeting, the House of Delegates passed a Resolution asking KMA to work with the Kentucky Insurance Commissioner to require that all Kentucky health insurance plans jointly create, fund and staff a statewide clearinghouse offering physicians one central phone number for complying with preadmission certification, length of stay approval and other utilization control requirements of all third party carriers operating within the Commonwealth. That task was assigned to the KMA Committee on Medical Insurance & Prepayment Plans which has spent much of its time since October trying to implement that Resolution.

In our meetings with the Commissioner it soon became apparent that there were a number of significant problems beyond the control of the Commissioner and the Committee which would prevent the intent of the Resolution from being implemented. It would be necessary to enact enabling legislation and to obtain funding from the General Fund of the State to establish a clearinghouse. It would be difficult, if not almost impossible, to keep up with the rapid changes that are now taking place in insurance coverage plans. Benefits change monthly. Department of Insurance records are not computerized and the Commissioner indicated he does not have staff available currently to operate a clearinghouse.

Approximately 30% of the businesses located in Kentucky are self-insured and have no requirement to report any information to the Commissioner other than the fact that they are self-insured. Several companies that do business in Kentucky have developed coverage plans through their headquarters office out of state, and although those plans cover employees in Kentucky, the Kentucky Insurance Commissioner has no control over them because they are located out of state.

While the Insurance Commissioner was extremely courteous to us and indicated a desire to be helpful, it soon became apparent to the Committee that his office would be unable to provide a great deal of assistance.

As a result, the Committee has asked the Kentucky Delegation to the AMA to introduce a Resolution into the next meeting of the AMA House of Delegates asking that appropriate agencies at the national level address this issue and try to come up with a solution to help physicians identify various cost containment requirements included under certain plans.

The Committee attempted to develop a very basic collection of information in this regard and that data base follows. We ran into numerous problems in our request for this information, not the least of which being the lack of response of most of the carriers to the inquiry the Committee sent to the over 600 companies licensed to sell health insurance in the state. We then turned to the individual hospital administrators in Kentucky and had a very good response from them, and that is the basis from which the following was derived. **This information is in two separate listings. One is an alphabetical listing of companies along with their carriers (if known) and the phone number for each particular company for obtaining information on cost containment requirements for their employees.**

The Committee feels this information may be of some value but offers the caveat that there may well be incorrect information included in this document because the information was obtained from second-hand sources, and as mentioned above, the plan coverages and contracts between employers and third parties change very frequently. However, we do feel that this might serve at least as a starting point and a reference for you and your office staffs to use. We plan to update this information as much as possible and we continue to urge carriers to do a better job advising their insureds of their responsibilities in making sure the physician is aware of any special considerations that must be given under their coverage.

Carrier	Phone #
Aetna	1-800-633-0002
American General	1-800-247-5267
American Heritage	1-800-821-2775 904-359-2546
American Physical Therapy	1-800-762-3029
American Pioneer	305-628-1776
American States	KPRO-426-8343
American United Life	1-800-558-4353
Care Review	
BC/BS of Central OH	1-800-882-9889
Benefit Trust	KPRO-426-8343
Blue Cross/Blue Shield of KY	1-800-932-3204 (502)423-2011
Blue Cross/Blue Shield Key Care	1-800-292-2372
Blue Cross of Mass.	1-800-392-0054
Blue Cross of PA	1-800-544-9335
Blue Cross of S.W. Ohio	1-800-932-3203
Blue Cross/Blue Shield A +	1-800-292-2372
Blue Cross/Blue Shield of Indiana	1-800-638-7195
Blue Cross/Blue Shield Option 2000	1-800-292-2372
Brighton Corp. Med.	(513)422-0063
Business Men's Assurance Co.	816-753-8000
Care America	1-800-742-2600
Caroon & Black Benefits	1-800-451-2727 (606)744-4812
Central Reserve Life of North America Ins.	1-800-321-3997 1-216-826-4100
Central States	(502)582-1169
Certified Life Ins. Co.	(818)981-9000
Choice Care Benefits	502-579-0726 502-341-6600
Choice Care HMO	(513)579-0354
COMED	1-800-424-4027
Comm. Mutual	1-800-932-3203
Central Review	
Commonwealth Life Ins.	1-800-222-1616 (502)560-2785
Confederation Life Insurance Co.	(404)980-6330
Connecticut General	1-800-633-9900
Consumers United Ins. Co.	1-800-424-9711
Continental Assurance	502-782-3230
Cost Care	1-800-762-3029
Crown Life Ins. (Excel)	(606)231-8183
Crum & Forster Corporation	(201)285-7259
E.B.M.	KPRO-426-8343
Equitable	1-800-662-2273
General American	KPRO-426-8343
Globe Union	1-800-822-8010
Golden Rule Insurance	(317)297-4123
Great West Life Assurance Co.	303-889-3456*
Hartford Insurance Group	# on patient's card
HCA	1-800-821-4144
Health Alliance Plan	1-313-872-7971
Health America HMO	1-513-793-9900 1-800-633-3183
Health Care Review Service	1-800-545-2211 1-800-468-5123
Health Monitor Plan	1-800-647-4477
Health Risk Management	1-800-634-CARE (612)893-9009
Health Service Review	1-513-422-0063
HMO Kentucky	1-800-432-4195 (502)423-2520
Humana Care Plus	1-800-523-0023
Humana Health Plan of KY, Inc.	1-800-448-0222 (502)568-3018
Hunt Dreaden	502-237-5444
HUR Services	1-800-872-3648
Independent Health Plan of KY	1-606-223-4554
Int. Health Benefits	(301)468-3730
Intra-Corp	1-800-633-9900
John Hancock	1-800-441-4044 (502)586-3261
John Hancock Mutual	1-617-849-1630
Kentucky Peer Review Org.	KPRO 800-292-2392 426-8343
Lifeguard	1-800-237-8374
Lincoln National	1-800-631-0734
M.O.N.Y.	415-461-6985
Mark Twain Life Ins. Co.	405-424-4093
Massachusetts Mutual	Cost Care 1-800-762-3029 1-800-437-2277
Maxicare Ohio, Inc. (HMO)	381-5775
Medcare	1-800-334-8568
Medcert	1-800-334-8568
Mediator	502-423-0051
Medicare	1-800-292-2392
Metropolitan	1-800-328-8640 Met Review 1-800-822-8010
Midwest Emp. Benefit Trust	614-431-1880
Midwest Foundation	Medco 381-6511
Mutual of Omaha	1-800-222-0719
Mutual Security Life Ins. Co.	1-800-348-2699
N.W. Life	1-800-328-6006
Occidental	1-800-766-3029
Pacific Mutual Life Ins. Comp.	PRS 1-800-223-4276
Pay Med/Health Assistance	1-800-654-5444
Peak Health Plan (HMO)	(513) 793-4510
Pilot Life	(615)325-4165
Pre-Admission and Concurrent Review Ser. (PACRS)	1-800-545-2211 1-800-251-7227

ASSOCIATION

Provident Mutual Life Ins. Comp.	1-800-843-3833
Provident Mutual Life Ins. Comp.	1-800-843-3833
Prudential	1-800-524-0569
	1-800-872-3648
Prudential - Pathfinders	1-800-245-2653
Prudential Quick Admit - MONY	1-800-872-3648
Republic National Life Group Ins. Co.	(214)824-0131
Reserve Life Ins. Co.	(214)670-9700
Review Plus/Health Risk	1-800-328-6006
Management	1-800-328-0158
SAFECO Life	1-800-426-7784
South West Employers Trust	1-800-327-7771
State Mutual	1-800-762-3029
Tele-Med	816-753-8000
The Hartford Insurance Group	back of employee form
Travelers	1-800-521-0157
U.F.C.W. Local Unions	513-381-6511
Underwriters National Assurance	317-923-1381
Union Central Life Insurance Co.	1-800-543-1356
	Cost Care
	1-800-762-3029
United Medical Resources	1-800-543-2114
United Mine Workers of America	1-800-292-2288
Veterans Administration	606-233-4511
Virginia Life Insurance Company	(804)281-6521
Vulcan Life	(205)942-2011
Wausau Insurance Companies	1-800-826-9781

Employer	Carrier	Phone #
A.J. Bayer (Interlake)	Equitable	1-800-662-2273
ADA Employee Benefits Fund	Self by Sisco	KPRO-426-8343
Airborne Express	Metropolitan	1-800-872-8211
Airco	Metropolitan	1-800-822-8010
Alcoa (salaried)	Prudential - Pathfinders	1-800-245-2653
Alexander's Restaurant	Blue Cross/Blue Shield	KPRO-426-8343
Alford Gustafson Ins. Agency Louis.		KPRO 1-800-292-2392
All-State Ford Truck Sales	Blue Cross/Blue Shield	KPRO-426-8343
Allen County Hospital	Blue Cross/Blue Shield A+	(502)237-3131 1-800-292-2372
Allied Paper, Inc.	Blue Cross of IN	1-800-638-7195 1-317-263-4100
Allis-Chalmers		KPRO 426-8343
American Air Filter, salaried	Aetna	KPRO-426-8343
American Airlines	Prudential - Quickadmit	1-800-872-3648
American Benefit Trust	American Pioneer Life Ins. Co.	(305)628-1776
American Data Services	Blue Cross/Blue Shield	KPRO-426-8343
American General Employees	American General	1-800-247-5267
American Postal Workers Union		1-301-622-5650
American Printing House for the Blind	General American	KPRO-426-8343
American Standard	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Andy Anderson Ins. Agy. 106 Owensboro		KPRO 1-800-292-2392 (502)423-2199
Appalachian Computer	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Appalachian Reg. Hospital	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Arasmith Judd, Rapp & Assoc.	Blue Cross/Blue Shield	KPRO 426-8343
Arbys	Prudential	1-800-742-2600
Archdiocese of Louisville	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Armco	Blue Cross of South West Ohio	1-800-932-3203 1-800-852-7626
Armstrong Transfer	Lincoln Nat'l	1-800-631-0734
Arrasmith, Judd, Rapp & Assoc.	Blue Cross/Blue Shield	KPRO-426-8343
Arvin	Prudential	PACRS 1-800-222-0719
Ashland Oil, Inc.	The Claims Center	1-614-486-5696
Associated Indus.-KY Leaf Tobacco	Blue Cross/Blue Shield A+	423-2199
Associates Ins. Agy.		KPRO 426-8343
Assurance Professionals, Inc. 77 Louisville		KPRO 1-800-292-2392

Audio Systems Inc.	Blue Cross/Blue Shield	KPRO-426-8343
Austin Nichols & Company	Blue Cross/Blue Shield A+	423-2199
Austin Powder Co.	John Hancock	1-800-441-4044
B. A. Easley Ins.		KPRO 426-8343
B. Dalton Booksellers		Review Plus 1-800-328-6000
B. L. Ballard Ins.		KPRO 426-8343
B.F. Goodrich (Union Employees)	Cost Care	1-800-762-3029 (502)395-4151
Bakery & Conf. Union	Int. Health Benefits	(301)468-3730
Banc One Corp.	Prudential	1-800-545-2211
Bank of Louisville	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Barbourville Ins. Agency, Inc. 24		KPRO 1-800-292-2392
Barmore Cons, Inc.	Blue Cross/Blue Shield	KPRO-426-8343
Barnes Ins. Agy.7, Adairville		KPRO 1-800-292-2392 426-8343
Baughman Ins. Agy.27, Harlan		KPRO 1-800-292-2392 426-8343
Bear Auto Care	Benefit Trust Life	KPRO-426-8343
Bear Auto Care	Blue Cross/Blue Shield A+	423-2199
Bechtel Corp.	Metropolitan	1-800-872-8211
Belk Simpson	Prudential	PACRS 1-800-545-2211 (704)525-9262
Bel Cheese	Blue Cross/Blue Shield A+	423-2199
Bethlehem Steel	Blue Cross of IN	1-800-638-7195 1-317-263-4100
Big Springs Country Club	Blue Cross/Blue Shield A+	423-2199
Bishop Stone Ins. Agy. Inc.		KPRO 426-8343
Bishop, Stone & Davenport Ins. 50		KPRO 1-800-292-2392
Glasgow Blair Comm. (Option 2000)	Blue Cross/Blue Shield A+	423-2199
Blake, Hart, Taylor, & Wiseman 97 Bowling Green		KPRO 1-800-292-2392 KPRO 426-8343
Blue Cross of IN	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Blue Cross of SW OH Employees	Blue Cross of SW OH	1-800-932-3203 1-800-852-7626
Blue Cross/Blue Shield Employees	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Blue Grass Ins. Agency, Inc 82 Lexington		KPRO 1-800-292-2392
Blue Grass Provision	Prudential	1-800-545-2211
Bluebell Incorp.	Medcare	1-800-334-8568
Bluechip Cards	Blue Cross/Blue Shield of Cen. Oh.	1-800-882-9889
Bluegrass Insurance Agy.		KPRO 426-8343
Boards of Education (All)	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Bob Cooper Ins. Agency 110 Vine Grove		KPRO 1-800-292-2392
Boehringer Manheim	Blue Cross of IN	1-800-638-7195 1-317-263-4100
Boise Cascade	John Hancock	1-800-525-6666
Bosse & Isaacs, Inc.	Blue Cross/Blue Shield A+	423-2199
Bow Valley Coal Resources	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Brandeis Machinery	Equitable	1-800-662-2273
Breeders Supply Company	Crown Life Ins. (Excel)	(606)231-8183
Bremner Biscuit	S.I.S.	1-800-328-8640
Briggs & Stratton		KPRO 800-292-2392 KPRO 426-8343
Brighton Corp.	Brighton Corp. Med.	513-422-0063
Bristol Myers Company (All Depts.)	Prudential	1-800-545-2211
Brophy Ins. & Real Estate		KPRO 426-8343
Brown & Nall Ins.		KPRO 426-8343
Brown & Williamson	S.I.S.	KPRO-426-8343
Brown Printing Co.	John Hancock Mutual	(502)586-9251
Brown Todd & Heyburn	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Brown, Rudy M. Ins. Agy.		KPRO 426-8343

Brown-Forman	Prudential	KPRO 426-8343
Brownsville Manufacturing	Blue Cross/Blue Shield A +	423-2199
Broy Hill Industries		(919)299-4720 1-800-334-8568 (Medcare)
Broyhill Furniture	Pilot Life	1-800-334-8568
Bruce Hobitzell Ins. Agy.		KPRO 426-8343
Buchart, Howard E. Ins. Agy.		KPRO 426-8343
Buckhorn		PRS 1-800-441-4226
Burdorf-Kessler Interiors	Blue Cross/Blue Shield	KPRO 426-8343
Burger's Super Market	American States	KPRO-426-8343
Burns Ins. Agency 99, Louis.		KPRO 1-800-292-2392 KPRO 426-8343
Burroughs Corp.	James Benefits	(612)-829-1060 1-800-328-1138
Burroughs Corp.	Review Plus	1-800-328-6000
Bush & Boggs Ins. Agency, Inc. 60 Lexington		KPRO 1-800-292-2392 KPRO 426-8343
Butterfields of Kentucky Ltd.	Blue Cross/Blue Shield	KPRO 426-8343
Byerly Motors, Inc.	Blue Cross/Blue Shield	KPRO-426-8343
C.K. Ash & Associates 113 Florence		KPRO 1-800-292-2392
Cabinet Pak	Central Reserve Life of No. Am. Ins.	(216)826-4100 1-800-321-3997
Cadiz Ins. Agency, Inc. 34		KPRO 1-800-292-2392 KPRO 426-8343
Calloway Steak House	Health Care Review	1-800-468-5123
Campbell Ins. Agency, Inc. 118 Florence		KPRO 1-800-292-2392 KPRO 426-8343
Cardinal Carry or Scholtz Equipment & Sales Co.	Blue Cross/Blue Shield A +	423-2199 KPRO 1-800-292-2372
Cardiology Ass. of Lexington	Crown Life Insurance Co. (Excel)	(606)231-8183
Cargil	Prudential	1-800-222-0719
Carroll Ins. Agency 53 Lexington		KPRO 1-800-292-2392 KPRO 426-8343
Central Ky Anesthesia		KPRO 426-8343
Champus		KPRO-426-8343
Chaney & Chaney Ins. Corp.		KPRO 426-8343
Charles M. Moore Ins. Agency 127 Bowling Green		KPRO 1-800-292-2392
Chelf Ins. Agy. 19, Louis.		KPRO 1-800-292-2392
Chi-Chi's	Great - West Life Assurance Co.	(303)889-3456
Christian County Ins. 114 Hopkinsville		KPRO 1-800-292-2392 KPRO 426-8343
Cincinnati Bell	Blue Cross of South West Ohio	1-800-932-3203 1-800-852-7626
Cincinnati Food Industry Plan		1-800-543-2114
Cincinnati Milacron	Blue Cross of South West Ohio	1-800-932-3203 1-800-852-7626
City of Bowling Green	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
City of Henderson	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
City of Hopkinsville		KPRO 426-8343
City of Maysville	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
City of Newport	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
City of Owensboro	Quick Admit - MONY	1-800-872-3648 1-800-292-2372
City of Richmond & Richmond Water	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Civil City of New Albany	Blue Cross of IN	1-800-638-7195 1-317-263-4100
Clairol Incorporated	Prudential	1-800-545-2211
Clark Co. Memorial Hospital	Blue Cross of IN	1-800-638-7195 1-317-263-4100
Clark, Ward, Stuart & Hopwood		KPRO 426-8343
Clarksville Community Schools	Blue Cross of IN	1-800-638-7195 1-317-263-4100

Clay Ins. Agency, Inc. 81 Manchester		KPRO 1-800-292-2392 KPRO 426-8343
Clinton Seafoods	Great - West Life Assurance Co.	(303)889-3456
Coca-Cola Bottling (Mid-East)	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Coldiron-Neikirk Ins.		KPRO 426-8343
Cole & Durham Ins. Agy., Hanson		KPRO 426-8343 KPRO 1-800-292-2392
Colonial Hospital Supply	Care America	1-800-742-2600
Combined Ins. Mart, Inc. 133 Beaver Dam		KPRO 1-800-292-2392
Combs Ins. Agency, Inc. 130 Lexington		KPRO 1-800-292-2392
Combs Ins. Agy.		KPRO 426-8343
Commercial Office Supply	Protective	KPRO-426-8343
Commonwealth Aluminum, salaried	Intra-Corp	1-800-633-9900
Commonwealth Dodge	Blue Cross/Blue Shield	KPRO-426-8343
Comprehensive Care Center	Blue Cross/Blue Shield A +	423-2199 1-800-292-2372
Conna Corp.	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Continental Metal Spec.	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Cook-Grogan Agency 73 Franklin		KPRO 1-800-292-2392 KPRO 426-8343
Coop America	Consumers United Insurance Company	1-800-424-9711
Cooper, Bob Ins. Agy.		KPRO 426-8343
Copeland Corp./ Mosier	Prudential Insurance Company	1-800-426-4432
Corhart Refractories	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Corps of Engineers	Prudential	1-800-222-0719
Cresent Paper Tube	Prudential	1-800-251-7277
Cronan Ins. Agy, 102, Louis.		KPRO 1-800-292-2392 KPRO 426-8343
Crucible Inc. (Hourly)	Blue Cross/Blue Shield	KPRO-426-8343
Crutcher Concrete Const. Co.	General American	KPRO-426-8343
Cumberland Bank	Blue Cross/Blue Shield A +	423-2199
Cumberland Valley Ins. Mgmt. 10		KPRO 1-800-292-2392 KPRO 426-8343
Custom Car Trim		KPRO 426-8343
D. D. Williamson & Company	Connecticut General	KPRO-426-8343
Dan Barker and Associates 67 Owensboro		KPRO 1-800-292-2392
Danville Ins. Agency 6		KPRO 1-800-292-2392
Danville Realty Co.		KPRO 426-8343
Daugherty & Trautwein	Blue Cross/Blue Shield	KPRO 426-8343
Davenport Robinson & Whitenack 46 Harrodsburg		KPRO 1-800-292-2392 KPRO 426-8343
Daviess Co. Fiscal Ct. & Jail	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Dawson & Kirkpatrick Ins. 58 New Haven		KPRO 1-800-292-2392 KPRO 426-8343
Days Inn Of America	Pilot	1-800-334-8568
Dealer Truck (Option 2000)	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Dean Foods	Prudential	1-800-222-0719
Del Fair Lanes	Central Reserve Life of No. Am.	(216)826-4100 1-800-321-3997
Dept. of Local Health	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Desa International	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Dillon Manufacturing	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Dixie Vending	Prudential Insurance Comp of America	1-800-251-7277
Dollar General Corp.	Hunt Dreaden	(502)237-5444 1-800-251-2607
Don Peach Ins. 126 Lawrenceburg		KPRO 1-800-292-2392
Dover Corp. (Salaried)	Blue Cross/Blue Shield	423-2199 1-800-292-2372
Dow Corning		1-800-331-7181

Dr. Frank W. Lehr	Blue Cross/Blue Shield	KPRO-426-8343
Drackett, Inc.	Prudential	1-800-545-2211
Dreis Co.	Blue Cross/Blue Shield A+	1-800-292-2379
Druthers International	EBM	KPRO 426-8343
Duro Paper Bag	Lincoln National (Health Watch)	1-800-631-0734
Dykes Ins. Agency 112 Richmond		KPRO 1-800-292-2392 KPRO 426-8343
E. H. Roeding Co., Inc. 96 Florence		KPRO 1-800-292-2392
E. J. Mabry Ins. Agency, Inc. 26 Henderson		KPRO 1-800-292-2392
Eagle Paper, Inc.	Benefit Trust Life	KPRO-426-8343
Easley Borsch, Inc. 117, Louis		KPRO 1-800-292-2392
East Kentucky Power Cooperative	Carroon And Black Benefits Inc.	(606)744-4812 1-800-451-2727
Eastern Ky University	Blue Cross/Blue Shield A+	423-2199
Ebonite International		KPRO 426-8343
Edison Brothers Store		Review Plus 1-800-218-6000
Electronic Systems USA	Benefit Trust Life	KPRO-426-8343
Embassy Suites Inc.		Review Plus 1-800-328-6000
Emmett Shearer Ins.		KPRO 426-8343
Am. Gen. Life & Acc. Employees	American General Life & Accident	1-800-247-5267
Employees of City of Owensboro	HUR Services	1-800-872-3648
Island Creek Coal Employees	Aetna Life Insurance Co.	1-800-633-0002
Enro Shirt Co.	Care America	1-800-742-2600
EPI	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Equitable Bag Co.	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Equity Insurance Managers	Crown Life Insurance Company (Excel)	(606)231-8183
Executive Inn & West	Blue Cross/Blue Shield A+	423-2199
Executive West (Hotel & Rest.)	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
F. Rai Hopkins Ins.		KPRO 426-8343
Fairchild Industries	Connecticut General	1-800-633-9900
Fall & Fall Ins. Agency 43 Fulton		KPRO 1-800-292-2392 KPRO 426-8343
Farmers Bank and Cap. Trust	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Faversham World Travel	Blue Cross/Blue Shield	KPRO-426-8343
Federal Aviation	Prudential	1-800-222-0719
Federal Employees	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Federal Employees Enrolled in HMP	Blue Cross of Southwest OH (HMP)	872-2061
Fincastle Medical Group	Blue Cross/Blue Shield	KPRO 426-8343
Findley Adhesive		1-800-558-4300
Fireman's Fund Insurance	Health Monitor Plan	1-800-647-4477
First Kentucky National Corp.	Prudential	KPRO-426-8343
First National Bank of Cinn.	Prudential	1-800-222-0719
Fisher Price Toys	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Fleetwood Homes of TN Inc.	Aetna Life Insurance	Cost Care (615)644-2211
Fleming Mason Electric Corp.	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Florsheim Shoes	Provident Life	1-800-621-4309
Flowers Industries, Inc.	American Heritage Life Insurance Co.	(904)359-2546 1-800-821-2775
Flynn Enterprises	Blue Cross/Blue Shield A+	423-2199 1-800-292-2372
Ford Motor Co. - Hourly Employees	Blue Cross/Blue Shield of KY	1-800-932-3204 (502)423-2112
Ford Motor Co. - Salary Employees	Humana Plus	1-800-523-0023
Formica Corp.	Prudential	1-800-222-0719
French Cline Ins. Agency, 128 Salyersville		KPRO 1-800-292-2392
Friendship Manor Nursing Home	Blue Cross/Blue Shield	KPRO 426-8343
Fries & Fries	Equitable	1-800-662-2273
Frisch's	Blue Cross of South West Ohio	1-800-932-3203 1-800-852-7626
Frisch's Care	Blue Cross of S.W. Ohio	1-800-543-1088

Furrs Cafeteria		Review Plus 1-800-328-6000
G. E. Subsidiaries (GEC-ID#)	Blue Cross of Mass.	1-800-392-0054
Galt House & Exec. Inn	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Gardner Ins. Agency 47 Owensboro		KPRO 1-800-292-2392 KPRO 426-8343
Gash Ins. Agency 39 Danville		KPRO 1-800-292-2392
Gash Ins. Agy (Hunston Ins. Agy.)		KPRO 426-8343
Gateway Press, Inc.	Self Insured	KPRO-426-8343
General Electric	Blue Cross/Blue Cross-Option 2000	423-2199
General Electric	Humana	1-800-523-0023
General Electric	Metropolitan Life	(502)237-3151 1-800-552-3232
General Motors	Blue Cross/Blue Shield	1-800-932-3203 1-800-521-5995
General Motors	Connecticut General Life Insurance	1-800-235-2302
General Motors Employees	Blue Cross/Blue Shield A+	1-800-292-2372 1-800-932-3203
Gibbens Ins. Agy. Sturgis		KPRO 1-800-292-2392 KPRO 426-8343
Gibbs-Inman Co.	Aetna	KPRO-426-8343
Gibson Greeting Card	Connecticut General	1-800-633-9900 (215)834-0160
Glasgow Ins. Agency 129		KPRO 1-800-292-2392 KPRO 426-8343
Glasgow Manufacturing Co.	Blue Cross/Blue Shield A+	423-2199
Glenmore Distillery	Prudential	1-800-251-7227
Glenn E. Martin Ins. 62, Louis.		KPRO 1-800-292-2392
Globe Union	Metropolitan	1-800-822-8010
Glover Ins. Agy.		KPRO 426-8343
Goalder & Goalder Ins. 11 Hickman		KPRO 1-800-292-2392 KPRO 426-8343
Graves Gilbert	Ind. Health Plan of KY	(502)843-1277
Graystone Ins. Agy.		KPRO 426-8343
Green River Steel	Blue Cross/Blue Shield A+	423-2199
Greensburg Ins. Agy.		KPRO 426-8343
Gregory Shirt Co.	Blue Cross/Blue Shield A+	1-800-292-2372 (502) 423-2199
Greyhound Corp.		Review Plus 1-800-328-6000
Grider Ins. Agency 70 Russell Springs		KPRO 1-800-292-2392
Guardian Life Empl.	S.I.S.	1-800-782-3029
H. B. Rice Co., Inc. 35 Paintsville		KPRO 1-800-292-2392
H. F. Warren & Co., 57, Sebree		KPRO 1-800-292-2392
H. J. Scheirich Co.	Sisco	KPRO-426-8343
H.E. Morehead Ins. Agy. Inc. 94 Scottsville		KPRO 1-800-292-2392
Hall-Clark Ins. Agy. Inc. 115 Prestonburg		KPRO 1-800-292-2392
Harned Ins. Agy., Inc. 56 Dawson Springs		KPRO 1-800-292-2392 KPRO 426-8343
Harry R. Grimes Ins. Agy. 66, Louis.		KPRO 1-800-292-2392
Hart Ins. Agy. 2, Stanford		KPRO 1-800-292-2392 KPRO 426-8343
Hasenour's Restaurant, Inc.	General American	KPRO-426-8343
Hayes, Utley & Associates, Inc.	General American	KPRO-426-8343
Health Care Collection	Blue Cross/Blue Shield A+	423-2199
Health Departments (statewide)	Blue Cross/Blue Shield A+	423-2199
Healthamerica	Healthamerica	456-8156 1-800-633-3183
Heavenhill Distill.	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Henderson City & County Planning	Blue Cross A+	423-2199
Henderson Ins. Services 105		KPRO 1-800-292-2392 KPRO 426-8343

Henry Vogt Machine Shop	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Hertz Rent-a-Car	Metropolitan	1-800-225-5481
Hesco Parts	Blue Cross of IN	1-800-638-7195 1-317-263-4100
Heublein, Inc.	Equitable	1-800-662-2273 1-317-263-4100
Hewlett Packard	US Administrators	1-800-872-3646
Hicks-Schulten, Inc. 31 Louisville		KPRO 1-800-292-2392 KPRO 426-8343
Higdon Food Service	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Hinkle Contracting	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Hinkle Ins. and Assoc.		KPRO 426-8343
Hoffman's Ins. Agency, Inc. 17 Mt. Sterling		KPRO 1-800-292-2392 KPRO 426-8343
Holley Automotive	Continental Assurance	(502)782-3230 Health Care Compare
Holley Carb.	Health Care Co.	1-800-722-7273
Honeywell	Metropolitan	1-800-822-8010 1-800-633-9900
Hoosier Panel Co.	Blue Cross of IN	1-800-638-7195 1-317-263-4100
Hopewell Co. Inc.		KPRO 426-8343
Horn's Ins. Agency, Inc. 125 Owensboro		KPRO 1-800-292-2392 KPRO 426-8343
Houlihan Ins. Agency 64 Lexington		KPRO 1-800-292-2392 KPRO 426-8343
Housing Authority-Maysville	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Howard E. Buchert 41 Ft. Thomas		KPRO 1-800-292-2392
Hueblein, Inc.	Equitable	1-800-662-2273
Hyatt Regency	Prudential	1-800-772-7273 1-800-892-7273
Hyers, Levy & Co.	Golden Rule	KPRO-426-8343
I. T. Verdin Co.	State Mutual	1-800-762-3029
Igert, Inc.	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
IIAK		KPRO 426-8343
Illinois Central Gulf	Self-Insured	1-800-253-1277
Image Photo.	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Ind. Haulers Association	Underwriters Nat'l Assurance Trust	(317)923-1381
Ind. Insurance Agents of KY		KPRO 1-800-292-2392 KPRO 426-8343
Independent Seed & Wire Co.	Blue Cross/Blue Shield	KPRO-426-8343
INMONT	Connecticut General	1-800-633-9900
Insurance Center of Owensboro American Medical Insurers of Kentucky Inc. 95 Bowling Green		KPRO 426-8343 KPRO 1-800-292-2392 KPRO 1-800-292-2392 KPRO 426-8343
Int. Permalite	Prudential	1-800-222-0719
Intellitek Computer Corporation	Crown Life Insurance Company (Excel)	(606)231-8182
International Ladies Garment Workers Union	Blue Cross/Blue Shield A+	1-800-292-2372 423-2199
Iron Workers Local 70	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Island Creek Coal Company	Aetna	1-800-633-0002
Ison Ins. Agency, Inc. 22 West Liberty		KPRO 1-800-292-2392 KPRO 426-8343
ITS, Inc.	Prudential	KPRO-426-8343
J. G. Keown Ins. 76 Hopkinsville		KPRO 1-800-292-2392
J. Kuntz & Co. Inc. (Restaurant)	Blue Cross/Blue Shield	KPRO-426-8343
J. V. Reed & Company	Blue Cross/Blue Shield	KPRO-426-8343
Jack Voigt Ins. Agency 37 Louisville		KPRO 1-800-292-2392
Jackson, Ins. Agency 25 Clinton		KPRO 1-800-292-2392 KPRO 426-8343
Jacob Levy (Option 2000)	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Jan & Linda Sportswear	Blue Cross/Blue Shield A+	423-2199
Jeff County Board of Health	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Jefferson Co. Board	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Jeff. Co. Fiscal Court	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199

Jerrico (Control #56520)	Prudential	1-800-251-7277
Jerry Austin Ins. 52 Benton		KPRO 1-800-292-2392
Jesse L. Riley & Son Ins., Inc. 8 Russellville		KPRO 1-800-292-2392
Jessie Ins. Agy. 121 Campbellsville		KPRO 1-800-292-2392
Jim Waits Ford (Option 2000)	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Jim Walker Ins. Agency 108 Louisville		KPRO 1-800-292-2392
Jims Waits Ford (Option 2000)	Blue Cross/Blue Shield A+	423-2199
Joe M. Lanter Ins., Inc. 104 Williamstown		KPRO 1-800-292-2392
John G. King Ins. 45 Lex.		KPRO 1-800-292-2392
Johnson Control/ Globe Union	Metropolitan	1-800-822-8010
Johnson Miller Ins. Agency 40 Taylorsville		KPRO 1-800-292-2392 KPRO 426-8343
Jones, Tom C. Ins. Agy.		KPRO 426-8343
K-VA-T Food Store	Blue Cross/Blue Shield A+	423-2199 1-800-292-2372
Kellwood Mfg. Co.		1-800-952-2677
Kenco Plastics	Blue Cross/Blue Shield A+	(502)423-2199 1-800-292-2372
Kendall Mfg. Co.	John Hancock Mutual	1-800-762-3029 Cost Care
Kennedy Ins. Agy.		KPRO 426-8343
Kenton Co. Airport Bd.	Connecticut General	1-800-633-9900 (215)834-0160
Kentucky Baptist Home for Chldrn	Blue Cross/Blue Shield A+	423-2199
Kentucky Bricklayers	Blue Cross/Blue Shield A+	423-2199 1-800-292-2372
Kentucky Construction Ind.	Blue Cross/Blue Shield A+	423-2199 1-800-292-2372
Kentucky Farm Bureau Federation	Blue Cross/Blue Shield A+	423-2199 1-800-292-2372
Kentucky Florist Assn.	Blue Cross/Blue Shield A+	423-2199 1-800-292-2372
Kentucky Fried Chicken	Equitable	1-800-662-2273
Kentucky Home Builders	Blue Cross/Blue Shield A+	423-2199 1-800-292-2372
Kentucky Medicaid		KPRO 1-800-292-2372
Kentucky Medical Ser. Foundation	Crown Life Insurance Company (Excel)	(606)231-8183
Kentucky Motor Transportation	Blue Cross/Blue Shield A+	423-2199 1-800-292-2372
Kentucky Nurserymen's Assn.	Blue Cross/Blue Shield A+	423-2199
Kentucky Peer Review	Benefits Trust Life	KPRO-426-8343 1-800-292-2372
Kentucky State University	Blue Cross/Blue Shield	423-2199
Key Care	Blue Cross/Blue Shield A+	1-800-292-2372
King, John G. Ins.		KPRO 426-8343
King, Louie W. Ins.		KPRO 426-8343
Kings Daughters Hospital	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Kingsbury/Atlas Concrete Comp.	Special Benefits Trust	KPRO-426-8343
Kirby Building Systems, Inc.	Pilot Life	(615)325-4165 (Medcert) 1-800-334-8568
Kirsch	Cooper Industry Benefits (Aetna)	(502)237-3161
Kister Wood Products, Inc.	Blue Cross/Blue Shield	KPRO 426-8343
Knights Inn	Prudential	1-800-222-0719
Kocolene - Twin Stop	Blue Cross/Blue Shield of IN	1-800-638-7195
Kosmos-Portland (Flintkote)		1-800-282-4198
Krispy Creme	Prudential	1-800-545-2211 1-800-222-0719
Kuhlman Electric Co.		(606)873-8011
KY Dept. of Health	Blue Cross/Blue Shield A+	1-800-292-2372
KY Manufacturing Co. (LOU)	Blue Cross/Blue Shield A+	423-2199
L. M. Berry and Company	Intracorp	1-800-351-1110
Lanter Ins. Inc.		KPRO 426-8343
Lenk Mfg. Co.	Prudential	1-800-545-2211
Leroy Lamar Ins. Agency 13 Hawesville		KPRO 1-800-292-2392 KPRO 426-8343
Levy, Jacob Co.	Blue Cross/Blue Shield (Option 2000)	423-2199
Lexington Country Place	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199

Lexington Fayette Co. Govt.	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Liquid Russ Transport		1-800-567-1482
Logan's	General American	KPRO-426-8343
London Ins. Agency, Inc. 68		KPRO 1-800-292-2392 KPRO 426-8343
Long John Silvers	Prudential	1-800-251-7277
Longaker Ins. Service, Inc. 93 Louisville		KPRO 1-800-292-2392 KPRO 426-8343
Lord Corp.		1-800-544-9335
Louie W. King Agency 9 Olive Hall		KPRO 1-800-292-2392
Louisville Baptist Hospitals	Prudential	KPRO-426-8343
Louisville Board of Health	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Louisville Collegiate School	Blue Cross/Blue Shield	KPRO-426-8343
Louisville Country Club	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Louisville Gas & Electric	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Louisville Ins. Corp.		KPRO 426-8343
Louisville Manufacturing	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Louisville Primary Care Ctr	Blue Cross/Blue Shield A+	423-2199 1-800-292-2372
Louisville Scrap	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Louisville Tile Distributors	Blue Cross/Blue Shield	KPRO-426-8343
Louisville Water Co.	Sisco	KPRO-426-8343
Lourdes Hospital (Paducah)	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
M & M/Mars	Self Insured	1-800-992-7273
M. C. Blair Ins. Agency 111 Carlisle		KPRO 1-800-292-2392 KPRO 426-8343
Mabry, E. J. Ins. Agy.		KPRO 426-8343
Madison Co. Fiscal Ct.	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Maloney Enterprises Image Photography	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Manning Equipment & Truck	Blue Cross/Blue Shield A+ (Option 2000)	423-2199 1-800-292-2372
Many Companies Represented	Prudential	
Marksberry Ins. Agency, Inc. 74 Owensboro		KPRO 1-800-292-2392
Marksberry Ins. Agy.		KPRO 426-8343
Martin & Calvert Ins. Service 20 Glasgow		KPRO 1-800-292-2392 KPRO 426-8343
Martin Marietta	Intracorp	1-800-633-9900
May Department Stores Inc.		Review Plus 1-800-328-6000 KPRO 426-8343
Mayflower Moving & Storage		871-3344
McCammish Manufacturing Co.	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
McClain, Baugh & Sims, Inc. 124 Mayfield		KPRO 1-800-292-2392 KPRO 426-8343
McClure-Hill-Case Ins. 131 Paris		KPRO 1-800-292-2392 KPRO 426-8343
McElroy, Wharton, Boldrick 109 Springfield		KPRO 1-800-292-2392
McNeil Properties	Pilot Life	1-919-299-2470
McPherson Ins. 55 Richmond		KPRO 1-800-292-2392 KPRO 426-8343
Mead Johnson & Company	Prudential	1-800-545-2211
Meade Co. Bd. (Option 2000)	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Medicare	Blue Cross/Blue Shield A+	1-800-292-2372
Medlabs		KPRO 426-8343
Meijer, Inc.	Travelers	1-800-521-0157 (Hartford, CT)
Melvin Simon & Assoc.	Pilot Life	1-800-334-8568
Mercer Transportation	Benefit Trust	KPRO-426-8343
Miami Margarine Co.	Blue Cross of South West Ohio	1-800-932-3203 1-800-852-7626
Midas	Prudential	Pacr 1-800-524-1092
Middlesboro Tanning	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199

Midland Ins. 21 Ashland		KPRO 1-800-292-2392 KPRO 426-8343
Miller Ins. Agency, Inc. 92 Grayson		KPRO 1-800-292-2392
Mirror Glaze Distributors, Inc.	Benefit Trust Life	KPRO-426-8343
Molloy Marine	Blue Cross A +	423-2199
Monarch Crown Corporation	Prudential	1-800-545-2211
Monticello Manufacturing	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Moore Ins. Agency 136 Russellville		KPRO 1-800-292-2392
Moore, Charles N. Ins. Agy.		KPRO 426-8343
Morehead St. University	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Morehead, H. E. Ins. Agy.		KPRO 426-8343
Morris Orten Ins. Agency 138 Dawson Springs		KPRO 1-800-292-2392
Motor Carrier Ser., Inc.	Pilot Life	1-800-334-8568
Motorola Inc.	Motorola Med. Benefits	1-800-634-CARE Review Plus 1-800-328-6000
Mountain Ins. Agency, Inc. 101 Pikeville		KPRO 1-800-292-2392 KPRO 426-8343
Mullins R. Lorin		KPRO 426-8343
Munday, Lacy Peden, Inc. 84 Hopkinsville		KPRO 1-800-292-2392 KPRO 426-8343
N. Glenn Goebel Ins. Agency 65 Taylorsville		KPRO 1-800-292-2392 KPRO 426-8343
Nasief Bros. Ctry. Sausage Mrkt.	General American	KPRO-426-8343
National Federation of Federal Employees	Prudential	1-800-222-0719
National Org. for Women	Consumers United Insurance Company	1-800-424-9711
National Products, Inc.	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Nationwide Ins. Comp.	Connecticut General	1-800-633-9900
Nature's Plant Food	Great - West Life Assurance Company	(303)889-3456
Nazareth Comm. Health Services	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
NCR	Prudential	1-800-543-0457
Neely Ins. Agy. Neikirk Ins. Agency, Inc. 59 Somerset		KPRO 426-2199 KPRO 1-800-292-2392
Neille Laviell		
New Albany Police Dept.	Blue Cross of IN	1-800-638-7195 1-317-263-4100
Newport Steel	United Medical Resources	1-800-543-2114 651-3737
News Journal, Inc.	Blue Cross IN	1-800-638-7195 1-317-263-4100
Nitzken Ins. Agy. 71, Louis. Louisville		KPRO 1-800-292-2392
NKC Hospitals	Prudential	KPRO-426-8343
North Texas State University		KPRO 426-8343
Norton Kosair Childrens Hosp	Blue Cross/Blue Shield A +	423-2199
Nunn Insurance Agency 44 Horse Cave		KPRO 1-800-292-2392 KPRO 426-8343
Nutone	Prudential	1-800-545-2211
Nutrius, Inc.	Prudential	1-800-222-0719
O'Leary Ins., Inc. 32 Covington		KPRO 1-800-292-2392 KPRO 426-8343
Ohio River Steel		1-800-292-2392 KPRO 426-8343
Ohio River Steel (NKC Only)	Pan American	KPRO-426-8343
Olan Mills	Provident	1-800-621-4309
Oldham Co. Bd. (Option 2000)	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
OLOP	Intracorp	1-800-654-1011
Omni Plastics	State Mutual	
Owen County Rural Electric	Caroon & Black	1-800-451-2727
Owens Illinois	Aetna	1-800-742-2100
Owensboro Electric Company	Crown Life Insurance Company (Excel)	(606)231-8183

Owensboro River Sand & Gr.	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
P.I.G. Improvement		1-800-872-3648
Paducah Power System	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Paine Webber	Aetna	KPRO-426-8343
Palm Beach	Metropolitan-Palm Beach Health Ins.	1-800-822-8010
Parker Kalon	Blue Cross/Blue Shield A +	423-2199
Parker Seal	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Parkway Medical Center	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Paschall Truck Lines	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Peach, Don Ins. Agy.		KPRO 426-8343
Pendennis Club of Louisville	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Pepsi Cola	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Peterson Ins. Agy. Ins.		KPRO 426-8343
Petter Supply Co.	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Phillips Ins. Agency, Inc. 140 Elizabethtown		KPRO 1-800-292-2392 KPRO 426-8343
Physicians Health Plan	PHP	425-4325
Pillsbury Company	N.W. Life	1-800-328-6006
Plamp Ins. Agy. 79, Louis		KPRO 1-800-292-2392 KPRO 426-8343
Pollitte Ins. Agy.		KPRO 426-8343
Pope Ins. Agy. 12, Harlan		KPRO 1-800-292-2392 KPRO 426-8343
Porter Paints	Aetna	1-800-633-6373
Porter, Tom Ins. Agy.		KPRO 426-8343
Postmaster Benefit Plan	Mutual of Omaha	1-800-222-0719 (402)342-7600
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Precision Machine	Blue Cross/Blue Shield A +	423-2199
Preferred Health Plan, Inc.	Prudential	KPRO-426-8343
Presbyterian Community Center	Blue Cross/Blue Shield	KPRO-426-8343
Pride Mark Metro		KPRO 426-8343
PrideMark Associates Ins. 139 Crescent Springs		KPRO 1-800-292-2392
Prime & Wine	Blue Cross of South West Ohio	1-800-932-3203 1-800-852-7626
Princeton Hosiery	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Procter & Gamble	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Proctor & Gamble	Blue Cross of South West Ohio	1-800-MEDIFAX
Professional Positioners, Inc.	Prudential	1-800-545-2211
Project Heating & Cooling	Massachusetts Mutual	KPRO-426-8343
Prudential Employees	Prudential	1-800-524-0569
Puckett Ins. & Real Estate Co. 36 Eminence		KPRO 1-800-292-2392 KPRO 426-8343
Purdom, Thurman & McNutt Ins. 3 Murray		KPRO 1-800-292-2392 KPRO 426-8343
Purolator Courier	Prudential	KPRO-426-8343
Pyro Mining Company		(502)333-4391
Quality Inn	Blue Cross of South West Ohio	1-800-932-3203 1-800-852-7626
Quality Manufacturing	Crown Life Insurance Company (Excel)	(606)231-8183
R. E. (Bob) Frazier Ins. Agency 89 Cumberland		KPRO 1-800-292-2392
R. J. Reynold	Equitable	1-800-662-2273
R. Lorin Mullins Agency, Inc. 38 Franklin		KPRO 1-800-292-2392
R. A. Jones Co	R. A. Jones Med. Plan	(513)422-0063
R. J. Reynolds	Equitable	1-800-662-2273
Ralston Purina	S.I.S.	1-800-328-8640

Rand McNally	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Read Miller Ins. Agy.		KPRO 426-8343
Ready Electric	General American	KPRO-426-8343
Red Kap Mfg. Co.		1-800-334-8568
Red Lobster	Prudential	1-800-441-2211
Reed Brothers Ins. Agency 4		KPRO 1-800-292-2392
Columbia		KPRO 426-8343
Reed Electrical Contractors		KPRO 426-8343
Regional Medical Center	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Reliance Electric	Equitable	1-800-662-2273
Reliance Universal	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Remke's Market	Pacific Mutual Life Ins. Comp.	1-800-223-4276
Modern Furn.		
Rental Uniforms	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Republic Welding Company	Protective	KPRO-426-8343
Rev Claims D S	Comed	1-800-424-4027
Reynolds Aluminum	Metropolitan	1-800-328-8640
Reynolds Metals	Metropolitan	1-800-328-6000
Reynolds Metals (Salary & Retired)	Metropolitan	1-800-328-8640
Reynolds-Foley Company	Protective	KPRO-426-8343
Rich Ladder Co.	Humana Care +	1-800-523-0023
Richards Bowling Ins., Inc. 85		KPRO 1-800-292-2392
Elizabethtown		KPRO 426-8343
Richmond Water	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Robert H. Clarkson Ins. Co.	Blue Cross/Blue Shield	KPRO 426-8343
Robert McNeil Property Management	Pilot Life:Medcare	1-800-722-3004
Robinson-Conner, Inc.	Medcare	1-800-334-8568
Rodes-Rapier	Blue Cross/Blue Shield A+	423-2199
Roy Rogers Restaurant	Blue Cross of South West Ohio	1-800-932-3203 1-800-852-7626
Rudy M. Brown Ins. Agency 100		KPRO 1-800-292-2392
Slaughters		
Russ Liquid Transport	Humana Care +	1-800-527-1482
Ryan Ins. 54, St. Louis.		KPRO 1-800-292-2392 KPRO 426-8343
Sat Air (same as Fairchild)	Connecticut General	1-800-633-9900
Scheirich, H. J. Co.	SISCO	426-8343
Scholtz Equipment	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Security Management Company	Aetna	KPRO-426-8343
Service Ins., Inc. 23		KPRO 1-800-292-2392
Harlan		KPRO 426-8343
Shearer Ins. Agency 75		KPRO 1-800-292-2392
London		
Shelby Co. Bd. (Option 2000)	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Shillito/Rikes	Connecticut General	1-800-633-9900 (215)834-0160
Shively Ins. Agy.		KPRO 426-8343
Signode	Equitable Life	1-800-323-3454
Simms & Montgomery, Inc. 119		KPRO 1-800-292-2392 KPRO 426-8343
Springfield		
Simon, Melvin Assoc.	Pilot Life (Medcare)	1-800-334-8568
Sky Chef	Prudential	1-800-872-3648
Smith & Assoc. Insurance Inc.	General American	KPRO-426-8343
Smith Electrochemical	Health Care Review	1-800-468-5123
Smith Insurors, Inc. 49		KPRO 1-800-292-2392
Cynthiana		KPRO 426-8343
Smith Price Ins. Agy.		KPRO 426-8343
Smith Wm. T.		KPRO 426-8343
Snyders (Salaried)	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Southern Central Electric	General American	KPRO-426-8343
Southern Gravure	Metropolitan	1-800-328-8640

Spartan Express	S.I.S.	1-800-822-8010
Spencer County Ins. Agy.		KPRO 426-8343
Spot Distributors (Option 2000)	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Square D. Company	Prudential	1-800-545-2211 525-3847
St. Anthony's Hosp. (Option 2000)	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
St. Matthews Seafood Company	Blue Cross/Blue Shield	KPRO-426-8343
State Employees & Bds. of Educ.	Blue Cross/Blue Shield A + (Option 2000)	423-2199
State Employees Teachers, School Employees and Retirees	Blue Cross/Blue Shield Key Care	1-800-292-2372
Stegeman Ins. Agy. 86, Newport		KPRO 1-800-292-2392 KPRO 426-8343
Sterling G. Thompson Company 91 Louisville		KPRO 1-800-292-2392 KPRO 426-8343
Stock Yards Bank & Trust Co.	Blue Cross/Blue Shield	KPRO-426-8343
Stuart Ins. Agy. 29, Louis.		KPRO 1-800-292-2392 KPRO 426-8343
Suburban Sanitation	General American	KPRO-426-8343
Sulier Ins. Agency, Inc. 18 Lexington		KPRO 1-800-292-2392 KPRO 426-8343
Summers Enterprises, Inc. 134 Greenville		KPRO 1-800-292-2392 KPRO 426-8343
Super Value	Prudential	1-800-222-0719
Superior Label Systems, Inc.	Union Central Life Insurance Comp.	
Sutton Shirt Company	Prudential	(PACRS) 1-800-251-7227 1-800-543-1356
Swope Group Employee Benefit Fund	Self By Underwriters	KPRO-426-8343
Sycamore Island Suppliers Inc.	Prudential	(PACRS) 1-800-524-1092
Taylor Co. Hospital	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Taylor Drugs	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Taylor Ins. Agy. 107 Augusta		KPRO 1-800-292-2392 KPRO 426-8343
Taylor, C.E.		KPRO 426-8343
Teamsters (Team Care Cards Only)	Central States	1-502-582-1169
TECOM		KPRO 426-8343
Texas Instruments	Aetna	1-800-228-0744
The Cumberland	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
The Drackett Company	Prudential	1-800-545-2211
The Galt House Executive Inn	Blue Cross/Blue Shield A +	423-2199
The Hopewell Co. 30, Paris		KPRO 1-800-292-2392 KPRO 426-8343
The Kentucky Group Inc.		
The Lenk Company	Prudential	1-800-545-2211
The Louisville Ins. Corp. 80		KPRO 1-800-292-2392
The Pelton & Crane Company	Prudential	1-800-545-2211
The Peterson Ins. Agency, Inc. 137 Hopkinsville		KPRO 1-800-292-2392
The Smith-Price Ins. Agency 90 Franklin		KPRO 1-800-292-2392
Thomas Industries Inc.	John Hancock	KPRO-426-8343 (502)886-3311
Thomas J. Porter 8 Lexington		KPRO 1-800-292-2392
Thoroughbred Associates, Inc. 98, Louis		KPRO 1-800-292-2392 KPRO 426-8343
Tom C. Jones Agency, Inc. 88 Hopkinsville		KPRO 1-800-292-2392
Touch Ross & Co.	Prudential	KPRO-426-8343
Town & Country Ford	Blue Cross/Blue Shield	KPRO 426-8343

TransAmerican Air Lines	Occidental	1-800-766-3029
Treyton Oak Towers	Blue Cross/Blue Shield	KPRO 426-8343
Tri-Co. Ford (Option 2000)	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Tri-Co. Manufacturing & Assembly	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Tri-County Ford (Option 2000)	Blue Cross/Blue Shield A +	423-2199
Trover Clinic (M.D.'s)	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
U.F.C.W. Local Unions		1-513-381-6511
UMWA Health Fund		(412)269-1994 1-800-292-2288
Union Underwear Workers in KY		1-800-292-2392 KPRO 426-8343
Uniroyal	US Administrators	1-800-872-6877
United Catalyst	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
United Mercantile Agencies	Blue Cross/Blue Shield	KPRO-426-8343
United Mine Workers of America		1-800-292-2288
United Technology	Connecticut General	1-800-633-9900
Unitek Corporation	Prudential	1-800-545-2211
Universal Ins. Agency, Inc. 63		KPRO 1-800-292-2392
Somerset		KPRO 426-8343
University of Kentucky	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Ursuline Sisters	Blue Cross/Blue Shield A +	423-2199 1-800-292-2372
Usher Transport	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Utility Trailer Sales	United Medical Resources	1-800-543-2114
Value Super Market	Lincoln National	1-800-328-9903
Van Meter Ins. Agency, Inc. 132		KPRO 1-800-292-2392
Bowling Green		KPRO 426-8343
Vaughn Ins. Agy. 16		KPRO 1-800-292-2392
Henderson		KPRO 426-8343
Vest Ins. Sev. 116, Louis.		KPRO 1-800-292-2392
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Veterans Admin. Med. Center		(606)233-4511
Victory Freightways	Blue Cross of IN	1-800-638-7195 1-317-263-4100
Vocational Schools (Option 2000)	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Vogt, Henry Machine Co.	Blue Cross/Blue Shield A +	423-2199
Voigt, Jack Ins. Agy.		KPRO 426-8343
Volt Information Science	Prudential	1-800-222-0719
W. E. Kingsley		KPRO 426-8343
Wadsworth, Inc.	M.O.N.Y.	1-415-461-6985
Wagner Electric Company	Crown Life Insurance Company (Excel)	(606)231-8183
Waits, Jim Ford	Blue Cross/Blue Shield (Option 2000)	423-2199
Wal-Mart		1-800-328-0158 1-800-328-6006
Walker Towing Co.	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Walker, Jim Ins. Agy.		KPRO 426-8343
Wallace-Lawson Agy., Inc. 48		KPRO 1-800-292-2392
Hopkinsville		KPRO 426-8343
Watson Ins. Agency, Inc. 122, Louis		KPRO 1-800-292-2392
Wayne Co. Hospital	Blue Cross/Blue Shield A +	423-2199
Weaks & Boyd Ins. Agency, Inc. 33		KPRO 1-800-292-2392
Mayfield		
Wessel Ins. Agency 87		KPRO 1-800-292-2392
Louisville		
Westerfield Ins. Agency 72		KPRO 1-800-292-2392
Hartford		
Western KY Hospitals	Blue Cross/Blue Shield A +	1-800-292-2372 (502)423-2199
Western Restaurants, Inc.	Great - West Life Assurance Company	(303)889-3456

Western Rivers Corp. 69 Paducah		KPRO 1-800-292-2392
Westinghouse Electric	Blue Cross of Western Pennsylvania	1-800-544-9335
Westlake Cumberland	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Westvaco	Connecticut General	1-800-633-9900 (215)834-0160
Westvaco (Union Group)	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Westwood Pharmaceuticals Inc.	Prudential	1-800-545-2211
Whirlpool Corporation (Salaried Employees)	Aetna Insurance Co.	1-800-633-0002
White Castle	S.I.S.	1-800-545-2211
Wilcox & Associates 123 Bowling Green		KPRO 1-800-292-2392
Wilson & McPherson, Inc. 135 Madisonville		KPRO 1-800-292-2392 KPRO 426-8343
Wine and Schultz Inc.	Pilot Life: Medcare	1-800-334-8568
Winn-Dixie	American Heritage Life Ins. Co.	1-800-821-2775 (904)359-2546
Winningham Apparel	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Wm. T. Smith Co., Inc. 14 Louisville		KPRO 1-800-292-2392
Wombwell Ins. Agency 5 Lexington		KPRO 1-800-292-2392 KPRO 426-8343
Woodall Agency, Inc. 120 Princeton		KPRO 1-800-292-2392 KPRO 426-8343
Woodspoint Boone Housing	Blue Cross/Blue Shield A+	1-800-292-2372 (502)423-2199
Yarbrough Ins. Co., Inc. 61 Marion		KPRO 1-800-292-2392 KPRO 426-8343
Young Ins. Services, Inc. 83 London		KPRO 1-800-292-2392
Zoeller Company Inc.	Self by Emp. Benefits Cons.	KPRO-426-8343

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May 1986

KMA Board of Trustees Discuss Lengthy Agenda at Spring Meeting

During the KMA Board Meeting, April 9 and 10, KMA President, Wally O. Montgomery, M.D. Paducah, reported on the Phonathon held April 2, to encourage physicians to renew their membership. Out of 51 physicians contacted, 32 indicated they would renew.

The KMA Board of Trustees met April 9 and 10, at the Headquarters office in Louisville. Items on the agenda included officers reports, approval of the 1986–87 KMA Budget, Governor Appointments and Committee Activities. Russell Travis, M.D., Lexington, Chairman of the KMA Health Care Access Operating Committee, reported that from the efforts in establishing the Physicians Care Program, KMA received a "We Can — We Care" flag issued by the President's Citation Program for Private Sector Initiatives.

Carl Cooper, Jr., M.D., Bedford, Chairman of the Committee on State Legislative Activities discussed the outcome of legislation KMA followed during the 1986 Kentucky General Assembly. A full report will be made to membership through the "Communicator."

Harold D. Haller, M.D., Chairman of the Membership Committee told the Board that the number of active members who have joined KMA is 10% more than at this time last year. The number of in-training members

John S. Llewellyn, M.D., (standing far right) Secretary of the Board of Medical Licensure, reported that the Board devotes much of its time to disciplinary matters. He also stated that the Board agreed with the KMA Judicial Council that use of anabolic steroids for increasing athletic performance is unethical and any physician prescribing steroids for this purpose would be subject to disciplinary action.

has increased 32% and the number of total dues-paying members is up 11%. Doctor Haller reported plans underway to target medical school faculty nonmembers and counties where membership is extremely low.

The next meeting of the KMA Board of Trustees is scheduled for August 6 and 7, 1986.

KEMPAC Board Meets

At its regular meeting on April 10, the KEMPAC Board of Directors named Fay Miles Executive Director of the organization. Mrs. Miles, who celebrated her 20th year of service with KEMPAC on April 1, previously served in the position as Executive Secretary.

"She has served the organization faithfully and well, and this announcement is certainly well deserved and appropriate," said KEMPAC Board Chairman Harold L. Bushey, M.D., Barbourville.

In other activities, the KEMPAC Board reviewed candidates for all of the Kentucky General Assembly House of Representatives positions and one-half of the State Senate districts. The Board noted that, although KEMPAC membership remains unfortunately low compared with the total KMA membership, the organization is one of the strongest PACs in the state.

S. Randolph Scheen, M.D., KMA Secretary-Treasurer and Chairman of the KMA Awards Committee reminded Board members to consider persons eligible for the DSA Award and KMA Award to be presented during the KMA Annual Meeting.

KMA Auxiliary President, Jo-Ann Daus, Louisville, presented AMA-ERF checks to Robin Powell, M.D., (right) Dean of the University of Kentucky School of Medicine and Alfred L. Thompson, Associate Dean for the University of Louisville School of Medicine. U of L received $26,565.48 and U of K received $18,616.87. It was also announced that Mrs. Daas has been appointed to a national AMA-ERF Committee.

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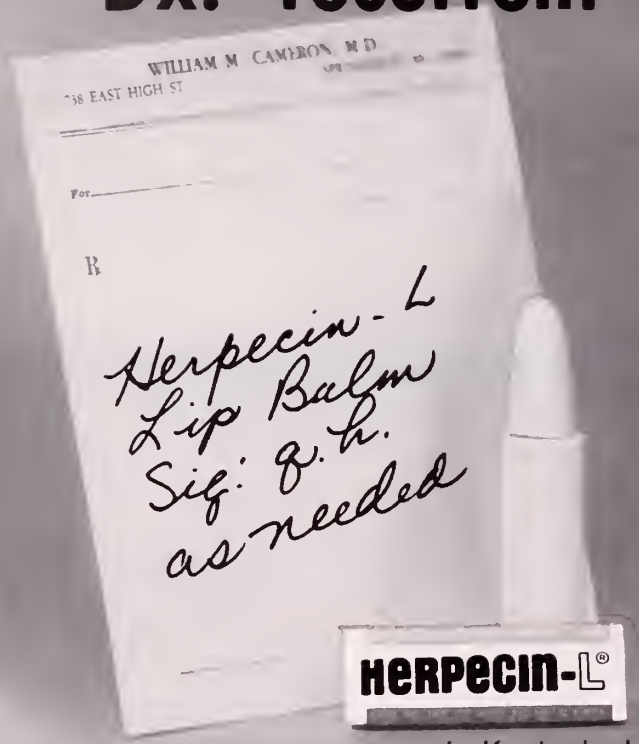

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OTC. *See P.D.R.* for information. For samples to make your own clinical evaluation, write: CAMPBELL LABORATORIES, INC., P.O. BOX 812-MD, FDR STATION, NEW YORK, N.Y. 10150

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The following KMA Physicians are recent recipients of the AMA's Physician Recognition Award.

John William Ambach, Louisville
Jae-Keun Bae, Fort Thomas
Philip Kay Blevins, Lexington
Carl Cooper, Bedford
James R. Cundiff, Shepherdsville
Clarence E. Denton, Louisville
Douglas Scott Dewar, Whitley City
Kenneth Milton Eblen, Henderson
George E. Estill, Maysville
Harold Thomas Faulconer, Lexington
Salem Michael George, Lebanon
Michael Dale Hagen, Lexington
Allan Duane Halbert, Martin
Mary Alice Hall, McDowell
Robert G. Heimbrock, Erlanger
Leroy Charles Hess, Florence
John Andrew Lach, Louisville
Thomas Penery Leonard, Shelbyville
Martin Jason Luftman, Lexington
Howard Gregory Maddux, Marion
Charles Frederic Mahl, Louisville
Roy Bryan McEndre, Lewisburg
James Edward Monin, Jamestown
Michael David Needleman, Louisville
Louis John Nutini, Erlanger
Fred Chester Rainey, Elizabethtown
James Sidney Rieser, Louisville
James Roger Schrand, Florence
Timothy Reed Scott, Carlisle
Charles Joseph Shipp, Greenville
Eugene Herman Shively, Campbellsville
James Gaines Sills, Hardinsburg
Paul Ray Smith, London
John B. Southard, Louisville
George Christian Stege, Louisville
Ronald Dale Weddle, Bardstown
Ira F. Wheeler, Manchester
Emmett Whitford Wood, Bardstown
John Cardwell Wright, Louisville

YEARS

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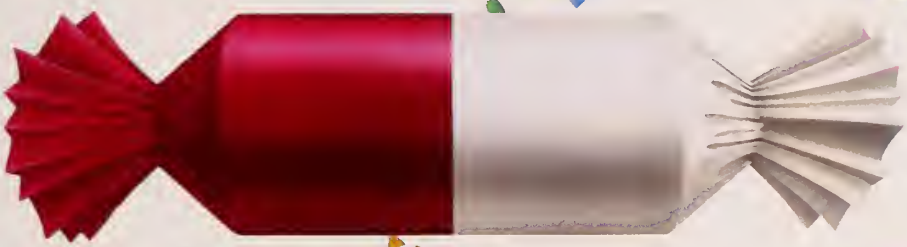

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To protect your patients, as well as their quality of life, add Isoptin instead of a beta blocker.

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Second, Isoptin spares patients the beta-blocker side effects that may compromise the quality of life.

With Isoptin, fatigue, bradycardia and mental depression are rare. Unlike beta blockers, Isoptin can safely be given to patients with asthma, COPD, diabetes or peripheral vascular disease. Serious adverse reactions with Isoptin are rare at recommended doses; the single most common side effect is constipation (6.3%).

Cardiovascular contraindications to the use of Isoptin are similar to those of beta blockers: severe left ventricular dysfunction, hypotension (systolic pressure <90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no artificial pacemaker is present) and second- or third-degree AV block.

So, the next time a nitrate is not enough, add Isoptin... for more comprehensive antianginal protection without side effects which may cramp an active life style.

ISOPTIN. Added antianginal protection without beta-blocker side effects.

Please see brief summary on following page.

ISOPTIN®
(verapamil HCl/Knoll)
80 mg and 120 mg scored, film-coated tablets

Contraindications: Severe left ventricular dysfunction (see *Warnings),* hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (except in patients with a functioning artificial ventricular pacemaker), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction < 30% or moderate to severe symptoms of cardiac failure) and in patients with any degree of ventricular dysfunction if they are receiving a beta blocker. (See *Precautions.)* Patients with milder ventricular dysfunction should, if possible, be controlled with optimum doses of digitalis and/or diuretics before ISOPTIN is used. (Note interactions with digoxin under *Precautions.*) ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild and controlled by decrease in ISOPTIN dose). Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C:* There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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KMA President Wally O. Montgomery, M.D., (right) accepts the 1985 AMA Membership award from Harrison Rogers, M.D., AMA President. The award was presented during the AMA Leadership Conference in February and is given to those states with an increase in AMA membership.

MEMBERS

Norman M. Cole, M.D., Louisville, has been named President-Elect of the American Society for Aesthetic Plastic Surgery. Doctor Cole earned his medical degree from the Loma Linda Hospital in California and had residency in plastic surgery at Duke University. He is a member of the Jefferson County Medical Society; the Kentucky Medical Association; American Medical Association; American Society of Plastic and Reconstructive Surgeons, of which he is Finance Committee Chairman. He is currently Assistant Secretary of the Southeastern Society of Plastic and Reconstructive Surgeons.

Henry D. Garretson, M.D., Ph.D., Louisville, has been elected President-Elect of the American Association of Neurological Surgeons. He now serves as secretary. Doctor Garretson is a graduate of the University of Arizona and Professor and Director of the Division of Neurological Surgery at the University of Louisville. He is a former President of the Southern Neurosurgical Society and Society of Neurological Surgeons. Doctor Garretson has served as Delegate to the KMA and Editor for the Jefferson County Medical Society.

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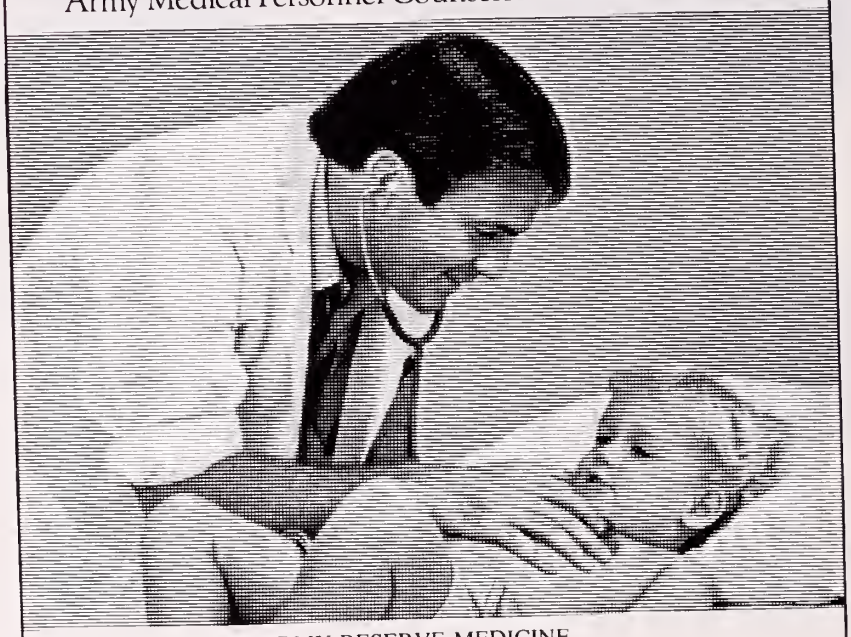

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Donald C. Barton, M.D., Nominated for KMA President-Elect

Donald C. Barton, M.D., a family practitioner from Corbin, has been nominated by the Whitley County Medical Society for KMA President-Elect. Doctor Barton graduated from the University of Louisville School of Medicine in 1960. He interned at General Hospital in Louisville and began his practice in Corbin in 1961.

Doctor Barton is a Diplomate of the Board of Family Practice. He has served KMA as Delegate from 1977-79; KMA 15th District Trustee from 1978-84; AMA Alternate Delegate in 1983; Chairman of the Board for 1983-84 and AMA Delegate since 1984. Doctor Barton was elected KEMPAC Chairman for two terms in 1976 and 1977.

In civic matters, Doctor Barton was elected to the Corbin City Council and served as former Mayor Pro-Tem.

He is on the teaching staffs in the Department of Family Practice at the University of Louisville and University of Kentucky.

Doctor Barton and his wife, Joan, have three daughters and one son.

CME

JUNE

10–12 KMA Emergency Medical Care Seminar, Executive Inn West, Louisville, KY (502) 459-9790

13–14 Update in OB-GYN, Hyatt Regency Hotel, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, University of Kentucky, Lexington, KY 40536-0086, (606) 233-5161

AUGUST

1–3 Contaminated Patient Handling Course, Kentuckiana Hazardous Materials Conference/School, Burhan's Hall, UofL Shelby Campus, Louisville, Kentucky. Contact: (502) 587-3900 or 636-0439 for additional information.

SEPTEMBER

12–14 3rd Annual Multispecialty Oculoplastic Surgery Symposium, Lexington Marriott Resort, Lexington, Kentucky. Contact: Doctor Constance M. Fulmer, Director of Medical Education, Good Samaritan Hospital, Lexington, KY 40508, (606) 252-6612 Ext. 3156.

22–25 Kentucky Medical Association Annual Meeting. Ramada Inn East/Convention Center, Louisville, KY (502) 459-9790

OCTOBER

9–10 14th Annual Pediatric Surgery/Pediatrics Symposium concerning the "Care of the Seriously Ill Child." Union Station, Indianapolis, Indiana. Contact: Jay L. Grosfeld, M.D., Surgeon-in-Chief, Riley Hospital, 702 Barnhill Drive, Indianapolis, IN 46223, (317) 264-4681 or Registrar, Division of Continuing Medical Education, Indianapolis, IN 46223, (317) 264-8353.

9–10 20th Annual Newborn Symposium, Kosair Children's Hospital Auditorium. Contact: Pat Gregg, Administrative Coordinator, Department of Pediatrics, School of Medicine, University of Louisville, Louisville, KY 40292, (502) 562-8826.

James Sammons, M.D., (right) expressed his appreciation recently to KMA Executive Vice President, Robert G. Cox, for his service on the Advisory Committee to the AMA Executive Vice President. Robert Cox recently completed his second three-year term on the Advisory Committee.

CLAIMS AWARENESS PROGRAMS

The 1985 KMA House of Delegates endorsed the KMIC's Claims Awareness and Prevention Programs. Various speakers and programs are available from KMIC regarding professional liability insurance and various aspects of the malpractice problem. Contact KMIC for further details.

Before prescribing, see complete prescribing information in SK&F CD. literature or *PDR*. The following is a brief summary.

* **WARNING**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: **Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium: use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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Serum K^+ and BUN should be checked periodically (see Warnings and Precautions)

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25 mg Hydrochlorothiazide/**50 mg** Triamterene/SKF

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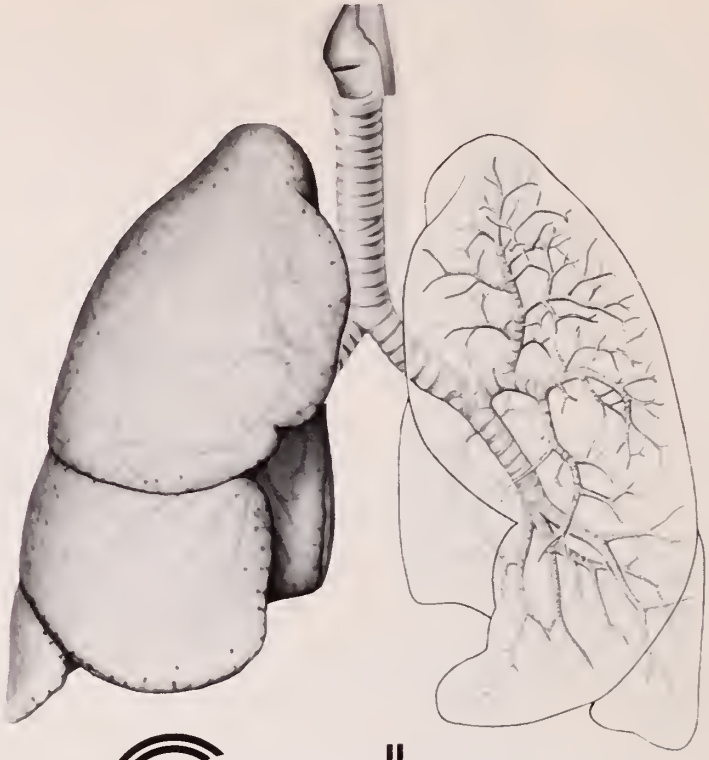
Consider the causative organisms...



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250-mg Pulvules® t.i.d. offers effectiveness against the major causes of bacterial bronchitis

Haemophilus influenzae, H influenzae, Streptococcus pneumoniae, Streptococcus pyogenes
(ampicillin-susceptible) (ampicillin-resistant)

Note: Ceclor® is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor® (cefaclor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae, Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci).

Contraindications: Known allergy to cephalosporins.

Warnings: CECLDR SHDULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CRDSS-ALLERGENICITY. POSSIBLE REACTIDNS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:
- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:
- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

Abnormalities in laboratory results of uncertain etiology
- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest* tablets but not with Tes-Tape* (glucose enzymatic test strip, Lilly)

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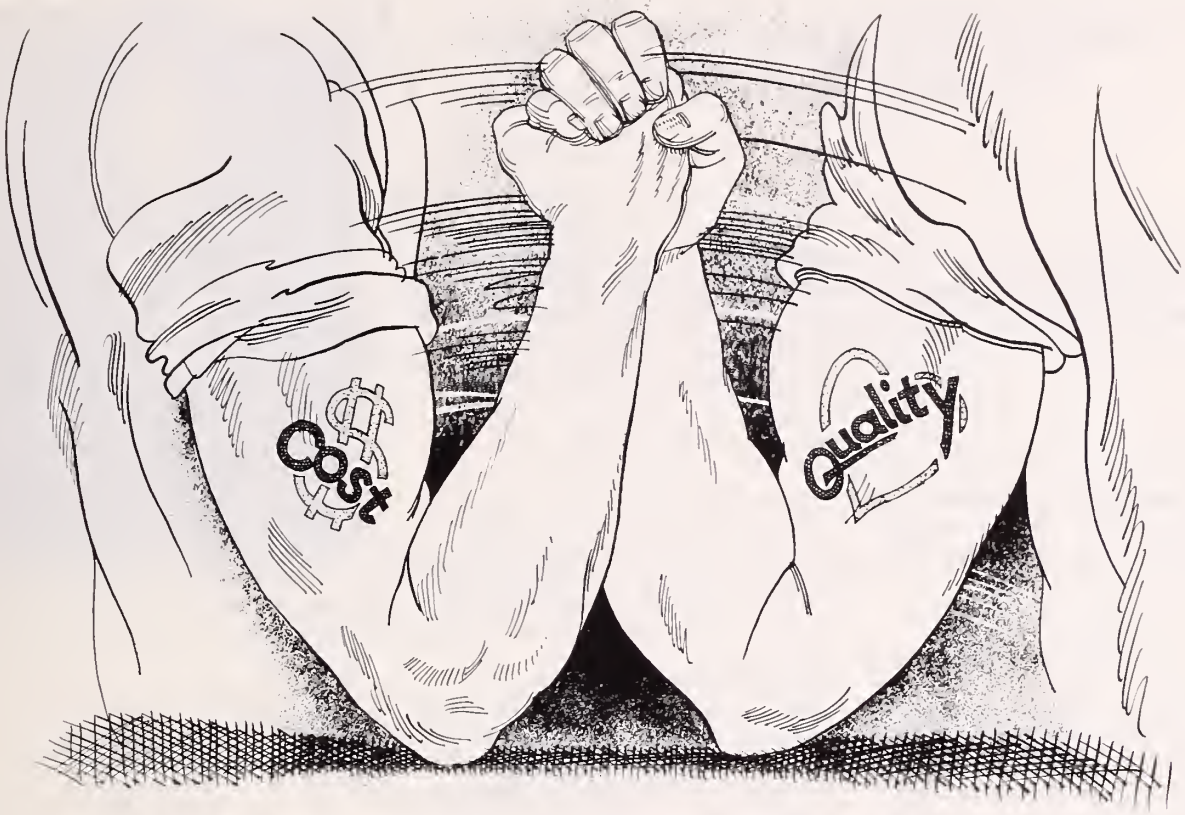

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You want what's best for your patients—not what's cheapest. Medicine shouldn't be practiced any other way.

Yet today's physicians are wrestling with a troublesome array of cost-containment initiatives: fee freezes, arbitrary caps on Medicare reimbursement, even restrictions on access to care. The stakes are high—life or death.

The AMA is in favor of cost-effectiveness, but not at the expense of quality care—or physicians' freedom to provide it. So we're acting, not reacting—by delivering cost-effectiveness information at special workshops and annual meetings; by offering publications including the Physician's Cost Containment Checklist; and by launching programs, such as the Cost-Effectiveness Network for hospital staffs to test cost-effectiveness strategies, and the Health Policy Agenda for the American People, a long-range set of directions and priorities for health care.

In Washington, D.C., and in court, we're fighting government-imposed fee freezes and other attempts to restrict the rights of physicians and patients.

You can fight back—by joining the AMA. Together, we'll help make sure that quality wins—every time.

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Kentucky Medical Association Annual Meeting September 22-25, 1986

SCIENTIFIC SESSIONS

The Ramada Inn East and Convention Center, Louisville, will host the 1986 Annual Meeting. The Scientific Program Committee has invited speakers from across the nation to address this year's theme on "The Aging Patient."

Please make a special note to remember that this year all general scientific sessions will be held during the mornings only of Sept. 23, 24 and 25, with specialty groups meeting during each of those afternoons.

SPECIALTY GROUPS

Programs for 20 specialty groups will be held during the afternoons of Sept. 23, 24 and 25. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be held in the Ramada Inn East & Convention Center.

CME CREDIT

Physicians attending general sessions and specialty group meetings will qualify for 13½ hours of Category I Credit.

KMA HOUSE OF DELEGATES

The opening meeting of the House of Delegates will be held Monday, Sept. 22, at 9 a.m. in the Julia Belle Room of the Convention Center. Reference Committee meetings will begin at 2 p.m. on Monday and the final meeting of the House will begin at 6 p.m., Wednesday, Sept. 24. Officers for the 1986-87 Associational year will be elected during the final House meeting.

PRESIDENT'S LUNCHEON

This year's guest speaker during the President's Luncheon on Wednesday, Sept. 24, is **John J. Coury, Jr., M.D.**, AMA President-Elect. The Luncheon will also include presentations of KMA awards and the installation of the 1986-87 KMA President Richard F. Hench, M.D.

OTHER ACTIVITIES

The Annual **KEMPAC Seminar** will be held Monday, Sept. 22, at the Bluegrass Convention Center. A reception begins at 6 p.m. with dinner at 7 p.m. The **Second Annual McDowell/Crawford Ball** is scheduled during the Annual Meeting. Details will be available soon. **Scientific and Technical Exhibits** will be on display featuring new medical products, services and techniques. Members and guests have an opportunity to visit this area during the 30 minute intermissions scheduled throughont the general sessions and specialty group meetings.

Annual Meeting Guest Speaker
H. Worth Boyce Jr., M.D.

Drug-Induced Esophagitis: The Scourge of the Elderly

Few clinicians today are aware of the severe, even lethal, esophageal injury that can result from taking "pills" of many types. This problem likely has been around for many years, but only recently has begun to be recognized as being of major importance. Several drugs are known to produce mucosal ulcerations, mucosal slough and pseudomembrane formation and variable degrees of stenosis or stricture. The most common etiologic factors for "pill" esophagitis are: 1) taking the drug without adequate fluid; 2) the recumbent position; 3) size of tablet or capsule and 4) the chemical composition of the drug.

Annual Meeting Guest Speaker
Henry M. Clayman, M.D.

Treatable Causes of Visual Loss in the Elderly

Visual loss may be associated with ocular and systemic disease and both are more common in the elderly patient. Most opacities of the ocular media are now treatable by a variety of invasive and non-invasive techniques which can often be performed on an outpatient basis. The prognosis of visual loss in the elderly is much improved and the current ophthalmic state of the art in this regard will be discussed.

"The Aging Patient"
1986 KMA Annual Meeting

Reminder of Program Change

Specialty Group meetings will be held three afternoons during this year's Annual Meeting.

Afternoons of September 23, 24 and 25 will be reserved for specialty groups with General Scientific Session programs scheduled each morning at the Ramada Inn East and Convention Center.

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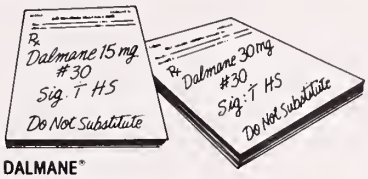

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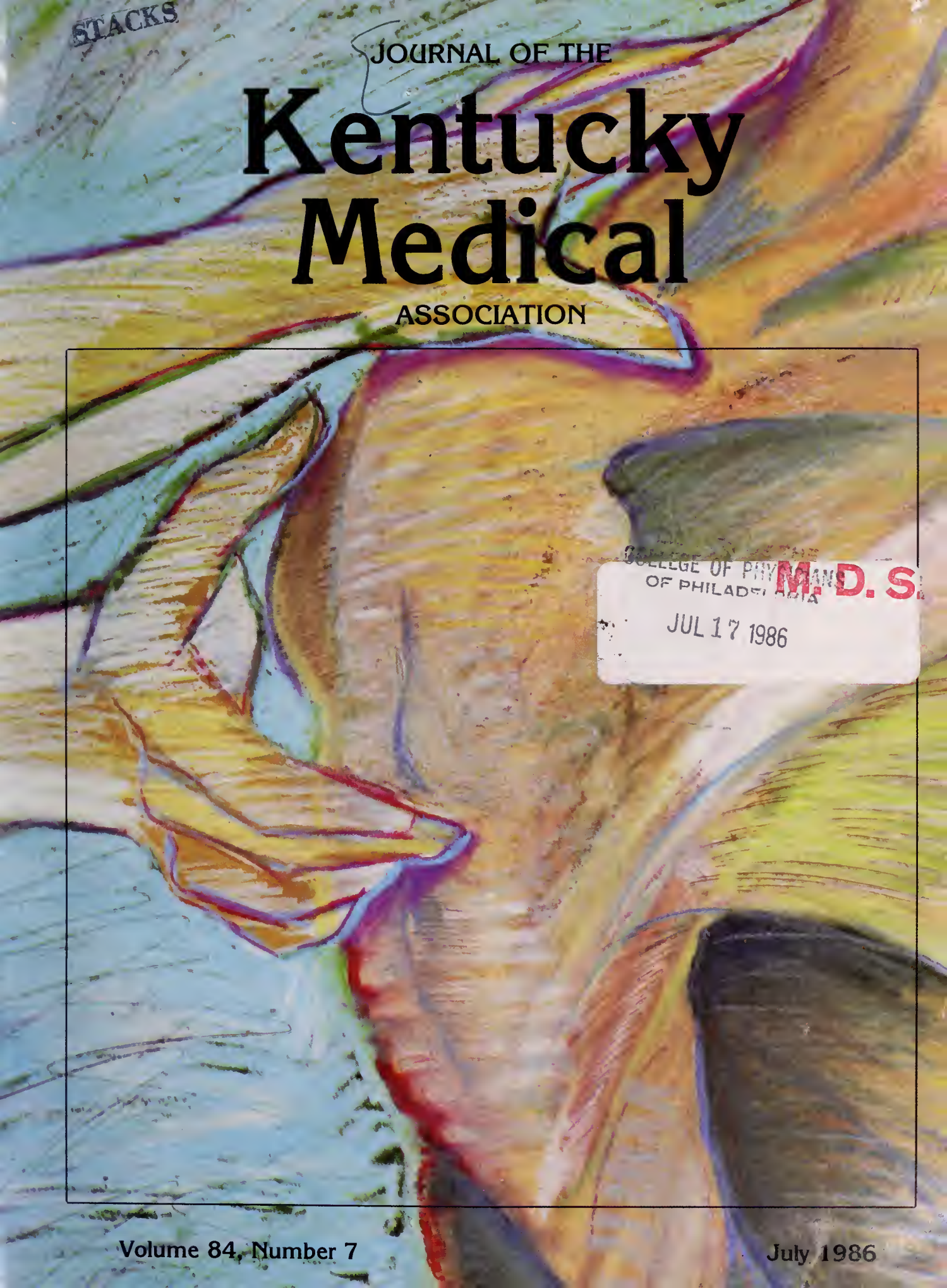

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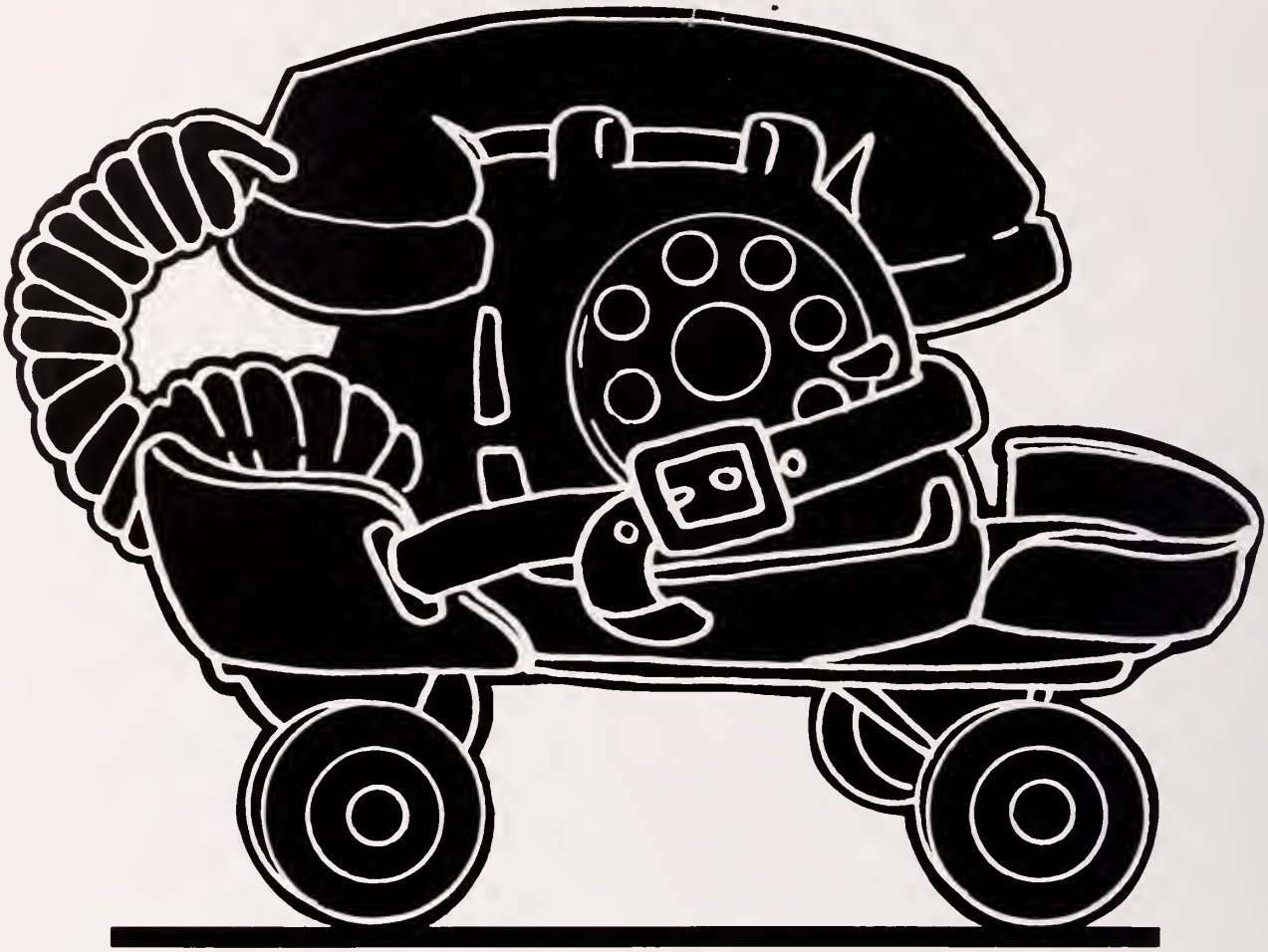

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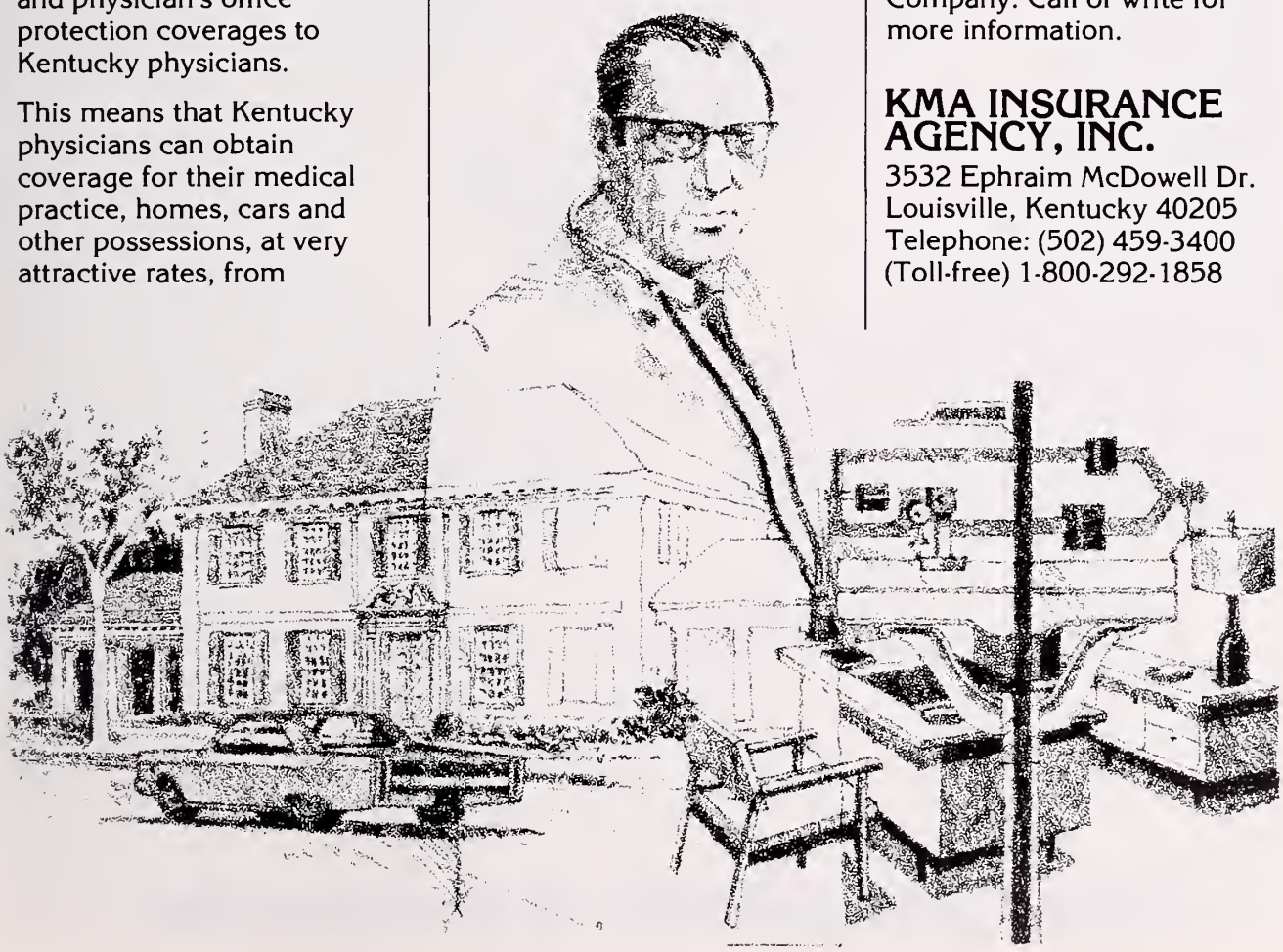

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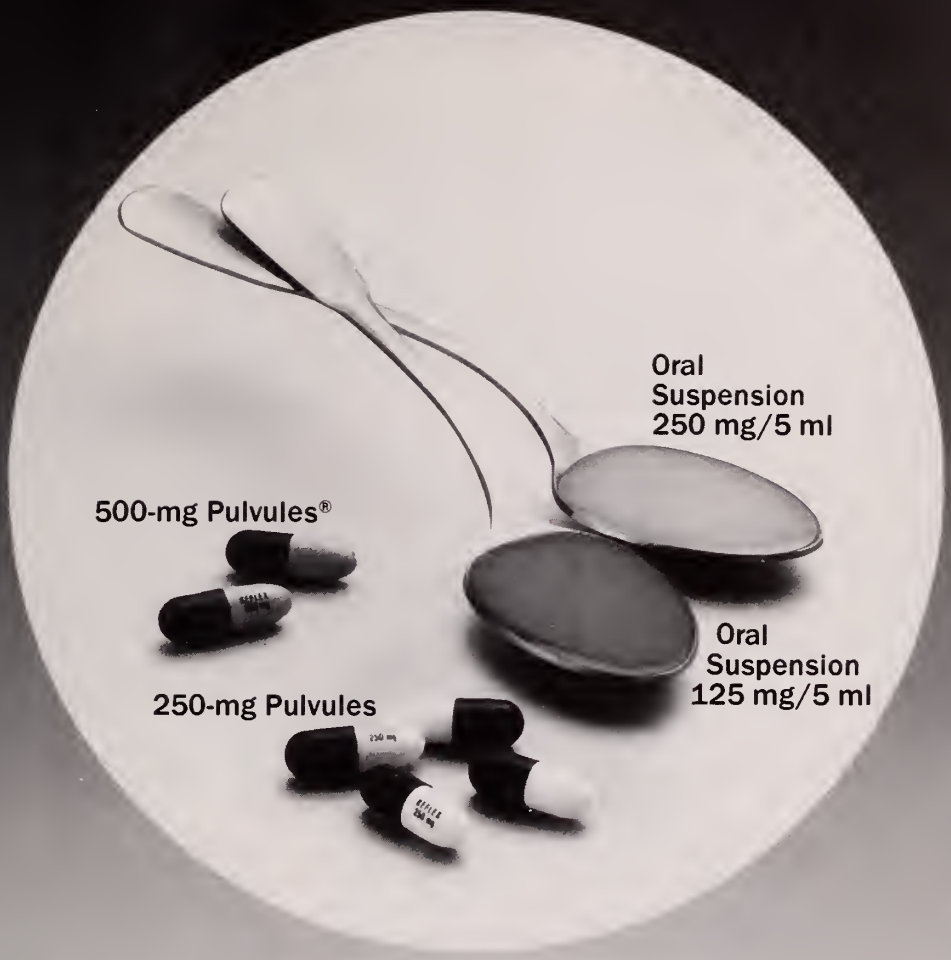

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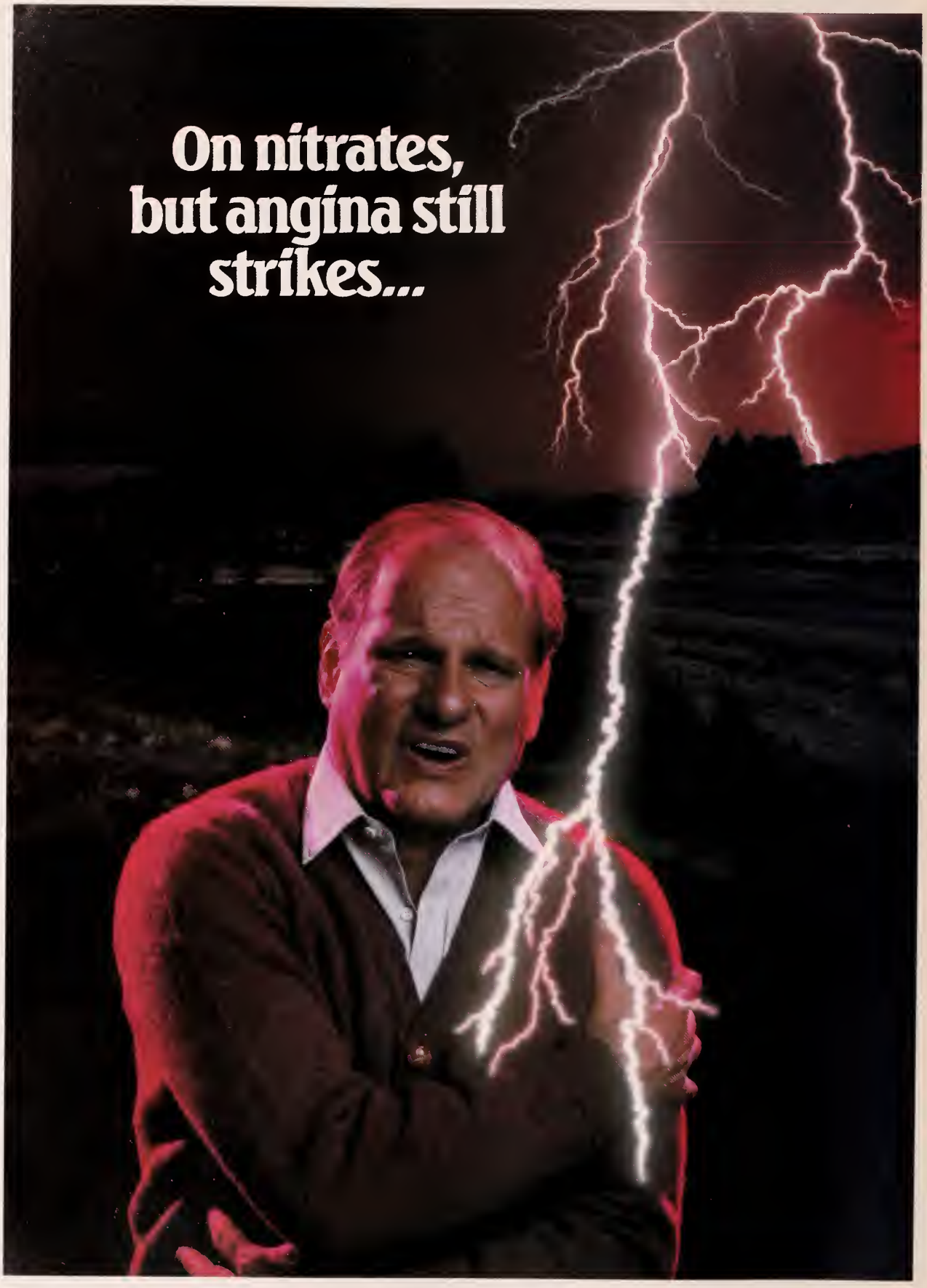
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One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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Recently I had my 50th birthday. It occurred on a Saturday so I had scheduled no surgery. The plan was a relaxing day with the family as my daughters were home. I worked in the yard and garden really trying to ignore that it was the big 50. That afternoon a friend called to ask me to come by and at Gerry's urging I went thinking I would return to a family birthday dinner.

However, when I returned a multitude of friends and a party greeted me ready to celebrate. It was a fun evening and I forgot the years which had passed so rapidly. In a retrospective mood the following day I reflected on the first 50 years and the expectations for the future.

AGING will be the theme of our 1986 Annual meeting September 23-25 in Louisville. And though I don't feel old I suspect that no one who reads this page actually feels old. It is such a gradual process that there is no dividing line between youth and age and also it seems to be different for each person. In this time we all are living longer due to improved lifestyle and health care. The medical community is finding a distinct group of problems with aging which has not been studied and researched as much as would be desired. This coming meeting is designed to approach those problems and present answers. Experts in each field will be speaking and available for your questions.

As a part of this Annual Meeting we want to recognize the physicians of this state who have practiced medicine for 50 years or more by having them as our special guest at the President's Luncheon. You in this group are special people having seen such a change in the medical diagnosis and treatment during your lifetime. We salute you for your part in perpetuating the quality of medicine through this period of rapid change.

The pioneer physicians of Kentucky gave us a great heritage which you have carried on. There is a building in Harrodsburg dedicated by the Kentucky State Medical Association on June 16, 1934, to these pioneer physicians. The first of these was Dr. Thomas Walker who led the initial surveying party into Kentucky's Knott county where he practiced the primitive medicine of the day. Dr. John Connolly was also an early settler and physician in the Louisville-Portland area in 1773. Dr. George Hart was the first practicing physician in Kentucky at Harrodsburg in 1775 and later in Jefferson County and Bardstown. Dr. John Johnston practiced in Mason County in 1785 and was the father of Gen. Albert Sidney Johnston of Civil War fame. Dr. William Goforth practiced in Mason County and later Cincinnati where he was the mentor of Daniel Drake. Dr. John Knight was a Shelby County surgeon in 1788 and was reputed to have performed the first successful cancer operation.

Other early Kentucky physicians were Dr. Samuel Brown of Transylvania University in 1799 and Dr. Ephraim McDowell of Danville who began his practice and well known career in 1795. Many others are mentioned on the plaque of this building and comtemplating their efforts to bring medical care to the citizens of Kentucky makes an interesting afternoon.

They practiced their profession to the best of their training and ability. They loved their patients and they have passed that attitude of caring on to us. Now our great challenge is to keep that spirit going — to make sure we and our younger colleagues continue to deliver

that tradition of excellent medical care with a caring spirit. Health-care has changed but the caring attitude should remain the same.

> **The skill of the physician shall lift up his head and in the sight of great men he shall be in great admiration.**
>
> **-Ecclesiasticus**

The annual meeting will also give you the opportunity to consider other concerns of the physicians of Kentucky. The ad hoc committee on liability has co ntinued to be very busy developing a long range plan of action which began last September. There are tentative plans for an open meeting on Sunday afternoon, September 21, in which we hope to have an in-depth study of the current status and options regarding liability reform. All KMA members will be invited to this meeting. And on Monday afternoon will be a special reference committee to discuss the suggestions and present a definite format to the house for their vote on Wednesday evening. Please be assured that your KMA is continuing to respond to all your concerns.

Wally O. Montgomergy, M.D.
KMA President

Neonatal Cytomegalovirus Infection

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Cytomegalovirus infection is a major problem in medicine today. The problem is serious because of the severe dysfunction and permanent handicaps that may occur. Additionally most neonates with CMV are not identifiable on clinical grounds and may show subtle deficits only years after a silent infection. In this report we incorporate recent advances with past studies to better appreciate the implications and outlook of CMV infections.

The developing embryo, fetus and the newborn are susceptible to different viruses which rarely produce significant disease in older pediatric groups. Viral infections are an important cause of perinatal morbidity and mortality because of their effect on the developing fetus and young infant. Maternal virus infection occurs in from 7 to 20% of pregnant women[1] and results in fetal infection in from 1.5 to 5.5% of all live births.[1] It has been estimated that from 1 to 7% of newborn infants acquire viral infections during delivery or soon after birth. The most frequently implicated viruses are cytomegalovirus (CMV), rubella and herpes simplex. CMV is the most common congenital infection and occurs in 1-2% of all pregnancies in the United States.[2]

Viral infections can be acquired at different times during intrauterine and neonatal life; *in utero* (antenatal), at the time of birth (perinatal) or after birth during the neonatal period (postnatal). The time of infection can determine the infant's outcome. Antenatal infections can result in resorption of the embryo, abortion, stillbirth, malformations, prematurity and intrauterine growth retardation. Manifestations range from an acutely ill infant that will die shortly after birth to a clinically well infant without obvious sequelae. A wide variety of outcomes is also seen for perinatal and postnatal infections. Many maternal viral infections that occur during pregnancy are restricted to either the respiratory, GI tract or both and do not threaten the fetus. Even when viremia occurs maternal host defenses and the placenta frequently form an effective protective barrier for the fetus.

Epidemiology

Cytomegaloviruses are ubiquitous.[3-6] Few humans escape CMV infection, but most acquire an asymptomatic form. In the United States and in Western Europe CMV infections are acquired gradually during infancy and childhood until by adulthood, 20–80% of individuals possess CMV complement fixing antibody. Infection occurs earlier in Asia, Africa and in low socioeconomic groups of the United States and of Western Europe, involving most children before two years of age. A high prevalence of virus shedding, frequent cross-infection of infants and perpetuation of the cycle are associated with early acquisition.

CMV has no gender predilection and there is no seasonal basis for infection.[6] There are two peak ages of occurrence: (1) neonatal and early childhood and (2) sexually active young adults.[4,7,8] Intermittent recurrent shedding may occur in a significant number of seropositive young adults.[9] However, CMV appears to be of low communicability.[10] It has been assumed that CMV is venerally transmitted based on the frequency of virus isolation from genital secretions and because of the prevalence of high antibody titer in sexually active populations.[11,12] CMV has been found to persist in semen for up to 14 months in an immunologically competent male.[13,14]

About 50–70% of all women entering child bearing years have previously experienced CMV infections;[15-17] the remaining 30–50% of women are susceptible to infection. As many of 15% of women have CMV isolated from randomly collected cervical secretions[6] and

TABLE 1
DIFFERENTIAL DIAGNOSIS

Toxoplasmosis	jaundice, hepatosplenomegaly, chorioretinitis, diffuse cerebral clacifications
Rubella	hepatosplenomegaly, jaundice, petechiae, purpura, microcephaly, thrombocytopenia, cataracts, cardiac lesions
Herpes	vascular skin lesions and conjunctivitis at 5-10 days of age. Disseminated intravascular coagulation, seizures, encephalitis. Periventricular calcifications occur late.
Syphilis	osteochondritis and epiphysitis of long bones on x-ray, rhinitis, jaundice, hepatosplenomegaly, hemolytic anemia, pneumonitis, lymphadenopathy
Sepsis	lethargy, jaundice, hepatosplenomegaly, (+) blood cultures
Erythroblastosis fetalis	jaundice, purpura, lethargy, (+) Coomb's test
CMV	jaundice, hepatosplenomegaly, petechiae, purpura, microcephaly, periventricular calcifications, chorioretinitis

40 to 50% of their vaginally delivered infants acquire CMV infection.[18] In these infected infants, asymptomatic exretion begins between one and three months of age. Transplacental transmission occurs at the rate of 0.5-2.5% of all live births in the U.S.[19-22] This equates to more than 30,000 CMV-infected infants born in the U.S. each year. Whereas 15% of pregnant women during the third trimester secrete virus, as few as 1.5% do so in the first trimester. This was initially thought to represent reactivation of virus during pregnancy. However as noted above, 15% of nonpregnant women excrete CMV. It has been suggested therefore that hormonal changes of the first trimester suppress CMV infection.[23] It is possible that failure to suppress CMV infection in early pregnancy can result in fetal damage.

The congenitally infected infant is usually, though not invariably, the first born of a young woman. The mean maternal age for congenital CMV infections is 19.4 years and 70% of all congenital infections occur in primigravidas.[2] Fetal damage most frequently results from primary CMV infection in pregnancy. Previous CMV infection in the mother may not fully protect the fetus in future pregnancies.[22] Consecutive infection of fetuses in subsequent pregnancies has been observed three years after the delivery of the first infected newborn. The first born is more severely affected and the same CMV serotype is usually recovered from each infant.[24]

No increase in the risk of spontaneous abortion has been noted for CMV infections.[25] Primary maternal infection, especially in the first trimester, is a serious and sometimes fatal threat to the fetus.[15,26,27] Primary infection can result in asymptomatic infections. On occasion recurrent maternal infection can produce congenital disease with neurological sequelae similar to that observed after primary infection.[27,28]

Perinatal transmission can occur from exposure to infected cervical secretions, by ingestion of virus-containing breast milk and by transfusion with CMV-positive blood. Mothers actively excreting virus at delivery can infect from 5 to 37% of seronegative infants; this is common in low socioeconomic groups.[18,29,30] Infection in those infants is recognized in the first 14 weeks of life, suggesting transmission at or close to parturition. Maternal antibody is transmitted transplacentally to the offspring but may not prevent infection.[18]

Cytomegalovirus can be transmitted in breast milk. Ten percent of seropositive women have the virus recovered in their breast milk.[31,32] Most of these women are older than 24 years. Delivery triggers viral reactivation which peaks two to 12 weeks later. As many as 69% of infants ingesting virus containing milk become infected.[33] Term infants usually remain asymptomatic,[18,29,34] whereas low birth weight, seronegative infants can develop systemic illness and are at risk of infection from banked breast milk. For infection to occur infants must ingest contaminated breast milk for at least one month.[33]

Symptomatic infections occur most frequently in infants not acquiring transplacental antibody. However, in some premature infants of seropositive mothers, symptomatic infection occurs when there is loss of passively acquired antibody and viral excretion commences before seven weeks of age.[35] Postnatally acquired CMV in premature infants of seronegative mothers produces serious or fatal symptoms in 50% of the cases;[29] these included hepatitis, chronic pneumonitis and death due to progressive respiratory failure.[36,37]

Several studies implicate blood transfusions as the major source of CMV in hospitalized infants born to seronegative mothers.[29,36,38-42] Acquired CMV has not been observed in seronegative infants who received only seronegative blood products.[29]

Nursery outbreaks have been recorded.[43,44] From 14 to 30% of premature infants not congenitally infected develop CMV infection during their prolonged hospitalization.[36,41] There is a higher seropositivity among nursery personnel.[45] Additionally there is a significant incidence of congenital defects in offspring of nurses caring for infants with congenital defects and for premature infants.[40] Infant to infant transmission in an intensive care unit can occur.[44]

A premature infant with transfusion-acquired CMV can transmit the virus to a seronegative mother.[47] Nearly 50% of seronegative mothers who care for CMV excreting infants show seroconversion within 12 months.[48] CMV may spread through a family by contact between children and adults.[49,50] Group day care results in early acquisition of CMV by seronegative children.[51]

Symptoms

More than 95% of all congenitally infected infants are asymptomatic in the neonatal period. Those infants with fulminating illness characteristically have low birth weight, jaundice, hepatosplenomegaly and petechial rash.[3,52,53] The most frequent findings among symptomatic newborns are petechiae (80%), hepatosplenomegaly (75%), conjugated hyperbilirubinemia (60%), jaundice (60%), thrombocytopenia (60%), microcephaly (50%), growth retardation (40%), prematurity (35%), inguinal hernia (25% of males) and chorioretinitis (12%).[54] These manifestations can be present at birth or develop hours or days later. Early onset of lethargy, respiratory distress and seizures suggest a poor prognosis and may be followed by death. In some infants jaundice persists for more than four months.[55] Hepatosplenomegaly and elevated liver function tests can increase during the first two to four months and persist for a prolonged period but chronic liver disease is rare.[56] Chorioretinitis can be bilateral or unilateral.[57] Abdominal distension from massive ascites occurs.[58] Lab findings include anemia and thrombocytopenia. Pleocytosis and increased protein concentration in CSF can be present. Cranial roentgenograms may reveal periventricular calcifications which many believe are pathognomonic for congenital CMV infection. Examination of a fresh urine specimen shows giant cells with inclusion bodies in the sediment in some infants.

Many affected infants (as many as 1200 per year) have severe neurological sequelae, as a result of CNS involvement. Psychomotor retardation and neuromuscular disability are common and occur in as many as 70% of symptomatic congenital infections.[3,54] CMV is the most common infectious cause of mental retardation. In many infants microcephaly either is present at birth or becomes apparent in a few months to a year.[56,59,60] Other manifestations of neurological injury include spasticity, diplegia and seizures. Deafness has also become apparent with increasing age and is present in 50% of all cases.[54] CMV is the most common infectious cause of childhood deafness.[6,9] Lesser degrees of handicaps such as defects in perceptual skills, learning disability, motor incoordination and emotional lability have been reported and become evident as the child enters school. It has been shown that increased school failure rates are associated with lower IQ in 15-20% of congenitally CMV infected patients.[21,61] As many as 5-15% of asymptomatic infants with congenital CMV (an additional 2000 annually) will develop these sequelae.[54] Long term follow-up evaluation of children with postnatally acquired inapparent CMV infection has shown no discernible neurologic, cognitive or behavioral sequelae except for some degree of sensorineural hearing loss in 8%.[62]

Perinatally acquired infection does not appear to produce CNS damage. However, adequate long term follow-up has not been done. Perinatal infection can produce interstitial pneumonitis in an otherwise healthy infant at three to four weeks of age.[63] The symptoms of CMV pneumonitis are usually mild but can mimic pertussis. Wheezing and tachypnea are common. The course is protracted with eventual recovery.

A self limited syndrome consisting of respiratory distress, hepatosplenomegaly, gray pallor and both atypical and absolute lymphocytosis has been described.[41] All had underlying lung disease. Typically the infants were preterm and spent more than 28 days in the hospital. CMV was detected from the urine and nasopharynx. The syndrome was benign and resolved for most infants after two weeks. The virus probably came from fresh, whole, heparinized blood transfusions the infants received.

Diagnosis

The diagnosis of CMV is based on virologic measures. Clinical signs and serological studies may be

suggestive of CMV but should not be considered diagnostic. CMV can be isolated from fresh urine, throat swabs, liver biopsy, buffy coat layer or other organs at autopsy. The virus is rarely isolated from the cerebrospinal fluid.[64] Virus can be isolated from the urine of 90% of symptomatic infants and from 20 to 50% of these cases will show giant cells in the urine. This is presumptive for CMV because adenovirus can also cause giant cells. Optimally a clean-voided specimen should be immediately cultured. If culturing is delayed the sample should be refrigerated or held on wet ice to avoid bacterial overgrowth and prevent a fall in viral titer from warm temperature.

There are several serologic methods available for confirmatory diagnosis. The complement fixation (CF) test and fluorescent antibody test are the most frequently used. The complement fixation test detects mainly IgG antibody and should be used in combination with the virus isolation to document CMV infection. Persistence of the CF titer in the first six months of life is considered diagnostic of congenital infection. Complement fixation titers that exceed maternal titers by four fold or more suggest active infection. Maternally acquired complement fixation antibody titer rarely persists at levels $\geq$ 1:8 for more than six months.[65] Complement fixation antibody increases late in the course and is not detected until three to five weeks after initiation of infection. It peaks at four to eight weeks after onset of infection. Complement fixation (CF), indirect hemagglutination antibody (IHA) and indirect fluorescent antibody (FA) all measure IgG antibody. In congenital infections these titers are stable over the first six months of life. When antibody is acquired transplacentally, the titer falls at two to three months then increases at approximately five to six months in the event of natal or postnatal infection. The major advantage of the FA test is that it can be used to detect IgM antibody.[66] Hanshaw, *et al*[67] detected CMV IgM antibody in 48 of 50 infants with virologically documented CMV infection. IgM antibody levels are most reliable as a diagnostic test because it does not cross the placenta and thus reflects congenital infection.

Clinical isolates may so greatly vary that antisera against one strain fails to neutralize another.[68,69] This may produce false negatives in viral diagnostic labs.[69] There has been no consistent pathogenicity associated with specific strains or serotypes.

Differential Diagnosis

Cytomegalic inclusion disease must be distinguished from a number of neonatal infections and diseases that are characterized by jaundice, hepatosplenomegaly and purpura (see table 1).

Prevention

No specific preventive measure is available for congenital CMV infection. The disease is probably transmitted by intimate contact, or prolonged contact with infectious secretions. There is usually a prolonged period of communicability because viral excretion has persisted for as long as eight years after documented infection. CMV can also be acquired by transfusion of fresh whole blood. Therefore citrated blood that has been stored for at least three days, deglycerolized blood, or blood from seronegative donors is recommended for transfusion of a pregnant woman or neonate.

To minimize the risk of congenital infection, it has been suggested that CMV titers should be checked in pregnant females, especially those who work in nurseries and pediatric care units. A maternal CMV-CF titer $\geq$ 1:8 should protect the infant from developing a clinically apparent infection.[64] Seronegative pregnant women should not care for infants with identified or suspected CMV infection. However most CMV positive infants are asymptomatic and therefore unrecognized. Optimally infants with CMV infection should be placed in strict isolation in a separate room. This is usually impractical and strict handwashing and gown technique may be sufficient to prevent viral acquisition.

Maternal immunity although not totally protective appears to modify the infective process[70,71] and vaccination of CMV seronegative women has been proposed to prevent symptomatic congenital infections.[72,73] Live CMV vaccines have been prepared. They are well tolerated and antigenic.[6,72] The attenuated forms used are AD-169 and Towne strain. CMV neutralizing antibody is found as long as one year post vaccination. The vaccine virus has not been detected in either pharyngeal secretions nor urine and contacts of vaccines do not develop antibodies nor virus shedding.

Current concerns about the vaccine include: (1) Attenuated live strains may be oncogenic. (2) The length of protection against wild virus has not been documented. (3) It is unknown if the attenuated virus can be passed transplacentally and cause congenital infection. (4) Will vaccine induced immunity provide pro-

tection when congenital infection occurs in mothers with natural immunity?

Treatment

Symptomatic CMV infections require general supportive measures appropriate for neonatal care including transfusions of packed RBC for anemia and platelets for thrombocytopenia. Antimicrobial agents should be used if bacterial infections are present or cannot be excluded. Unconjugated hyperbilirubinemia rarely requires exchange transfusion.

No chemotherapeutic agent has shown consistent effectiveness against CMV infections. 5-Fluorodeoxyuridine (FUDR) has been used for the treatment of leukemia patients with probable CMV pneumonitis. Clinical improvement was reported but no virologic studies were done. Adenosine arabinoside (Ara-A) and cytosine arabinoside (Ara-C) in subtoxic doses stops CMV viruria in patients with disseminated or congenital disease.[74] No evidence of clinical improvement was observed. Multiple doses of transfer factor have resolved CMV retinitis and stopped viruria after two doses.[75] However, no change in the clinical manifestation occurred. Gammaglobulin may be effective in preventing primary infection in seronegative organ recipients.[76] A significant increase in antibody titer specific for CMV is found after its administration. Those already infected have elevated antibody titer and do not benefit from gammaglobulin. Interferon may delay viral replication or activation.[77] Trifluorothymidine appears promising *in vitro* in the inhibition of human CMV, however, it toxicity at high doses necessary *in vivo* may prevent its use.[78]

Prognosis

Greater than 99% of all infants with symptomatic congenital CMV infection survive.[79] Their life expectancy is not significantly different from uninfected children. Early diagnosis of congenital infections is useful despite the current lack of specific therapy. Determination of visual, auditory and neuromuscular defects in infancy facilitates correction or compensation for the handicaps and lessens developmental loss. Infections acquired after birth are usually self limited and have an excellent prognosis. In some instances convalescence is prolonged. These patients have recurrent low grade fever and remain lethargic with anorexia for months.

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Tardive Psychosis

DAVID P. MOORE, M.D.

Tardive psychosis is a newly recognized side effect of long-term use of antipsychotics. On the basis of antipsychotic induced post-synaptic dopamine receptor supersensitivity in the limbic system, patients develop psychotic symptoms similar to those seen in schizophrenia. A report of an almost certain case of tardive psychosis is presented along with a pertinent review of the literature. Caution is urged in prescribing antipsychotics to patients, such as those with depression, who might respond to less dangerous medicines.

"Tardive psychosis"[1] is the name proposed by Chouinard and Jones for a psychosis which is caused by long-term administration of antipsychotics, and which symptomatically resembles schizophrenia. He and his co-workers suggest that its etiology is similar to that of tardive dyskinesia. In tardive dyskinesia, chronic blockade of post-synaptic dopamine receptors by antipsychotics in the corpus striatum produces an irreversible supersensitivity of the post-synaptic receptors, such that when the blockade is reduced with dosage reduction or discontinuation, a hyper-dopaminergic state results in the striatum, with the resultant familiar abnormal involuntary movements seen in tardive dyskinesia. According to Chouinard and his co-workers the same sequence of events occurs in the meso-limbic system, resulting in a limbic hyper-dopaminergic state producing, rather than abnormal involuntary movements, abnormal behavior.

To date, for a variety of reasons discussed later, it has been difficult to prove the existence of this syndrome. In this case report, however, I present what is, to my knowledge, the first description of an almost certain case of tardive psychosis.

Case Report

The patient was a 70-year-old white female, who was free of any psychiatric symptoms all of her life up until the age of 67 when she developed persistent depressed mood, guilt, fatigue, anorexia, and weight loss. A physician prescribed thioridazine and, although her symptoms remitted, the patient was continued on the thioridazine at 25 mg. daily or more for three years until another physician, noting a parkinsonian tremor and a normal mental status, discontinued it. Within days the patient became confused and was admitted.

On admission her mental status examination was remarkable for auditory and visual hallucinations, confusion, extreme incoherence (often to the point of a "word salad"), and delusions (for example, that her thoughts were being transferred between her and others). Her affect was within normal limits. A general physical examination and a neurologic examination were unremarkable, except for a suggestion of pronator drift of the right upper extremity and near continuous choreiform movements of the upper and lower extremities and repetitive involuntary lip smacking and tongue protrusion. The following laboratory tests were all either within normal limits or negative: CBC; SMA 18 (except for a uric acid of 8.0); thyroid function tests; FTA; ANA; B-12 level; magnesium level; cortisol level; electroencephalogram; and CT scan of the head both with and without contrast. The patient was placed on molindone 5 mg. at bedtime, and her mental status came within normal limits. The choreiform movements also remitted, however the involuntary lip smacking and tongue protrusion persisted. At one month follow-up, while still on molindone the patient remained free of both psychotic and depressive symptoms and had resumed her normal household duties.

Discussion

This case, unlike others in the literature, almost certainly represents a tardive psychosis, as other diagnoses are extremely unlikely. Neurologic illnesses are ruled out by the clinical picture and laboratory investigations. Other psychiatric illnesses, such as mania or a schizophreniform illness, are extraordinarily unlikely given the advanced age of the patient. What is left is the diagnosis of tardive psychosis and the case fills criteria for this diagnosis. The patient had undergone prolonged dopamine blockade with antipsychotics, and the psychiatric illness resembled schizophrenia and emerged abruptly upon discontinuation of the antipsychotic. The

concurrent appearance of a tardive dyskinesia, represented by the patient's abnormal involuntary movements, further supports this diagnostic possibility, as it indicates that dopamine supersensitivity had definitely occurred in the striatum, making the occurrence of supersensitivity in other regions, such as the limbic system a likely possibility.

Previous clinical descriptions of presumed tardive psychosis have been open to question, as other diagnoses were difficult to rule out. Initial reports focused on patients with schizophrenia who were treated with antipsychotics. Chouinard and Jones[2] reported on 10 patients who required ever increasing doses of a long acting depot injection of fluphenazine decanoate or enanthate and who manifested distinct worsening of their psychosis toward the end of the injection interval. They suggested that this course was unlikely for schizophrenia and that it was more consistent with an antipsychotic induced supersensitivity of post-synpatic dopamine receptors in the limbic system which became unmasked as the blood level of fluphenazine fell toward the end of the injection interval. Attractive as this hypothesis may be, it is quite possible, as their sampling technique was not randomized, that their patients simply had an unusually severe form of schizophrenia. A less easily dismissed case is that of Sale and Kristall.[3] They described a 21-year-old female who, because of phobic and obsessional symptoms, had been treated with antipsychotics for 13 years. Upon abrupt discontinuation of the antipsychotic she developed abnormal involuntary movements consistent with a diagnosis of tardive dyskinesia and, for the first time in her life, she also experienced delusions and hallucinations, which persisted. Although the course and the simultaneous occurrence of a tardive dyskinesia are consistent with an unmasked meso-limbic dopamine supersensitivity the possibility still exists, given the fact that schizophrenia often has an onset in late teenage or early adult years, that, rather than a tardive psychosis, this patient simply had a case of schizophrenia that developed in earlier years and became apparent after the antipsychotic was stopped.

It may never be possible, for ethical reasons, to conclusively prove that tardive psychosis exists and that long-term administration of antipsychotics can, in fact, cause a psychosis in normal controls. Consequently, cases such as the one presented here may have to suffice. Animal and autopsy data, however, support the notion that meso-limbic supersensitivity does in fact occur.

Both Lee and Seeman[4] and Owens *et al*[5] demonstrated an increased sensitivity of postsynaptic dopamine receptors in brains of patients who had received antipsychotics, not only in the striatum but also in the nucleus accumbuns. Furthermore, the sample of Owens *et al*, included brains of patients who although treated with antipsychotics earlier in life, had not received any antipsychotics for at least one year prior to death, indicating that the antipsychotic induced postsynaptic dopamine receptor supersensitivity in the limbic system could be permanent. Similar findings were noted in animals by Muller and Seeman.[6] They subjected rats to chronic treatment with haloperidol. Specimens of the caudate and meso-limbic areas of these rats were then compared with control rats, and increased affinity for haloperidol was noted in the specimens from treated rats, thereby demonstrating the occurrence of antipsychotic induced meso-limbic dopamine receptor supersensitivity.

The recognition of tardive psychosis is important from both research and clinical perspectives. Given that the psychosis is symptomatically similar to schizophrenia, it adds weight to the "dopamine hypothesis" of the etiology of schizophrenia. Of more immediate importance however, are the clinical implications. Although we have no data on the incidence of tardive psychosis, it seems reasonable to guess that it would be similar, given the common etiology, to the incidence of tardive dyskinesia. If this is true, then approximately 20%[7] of patients given long-term treatment with antipsychotics may develop a psychosis secondary to that treatment. Clearly, such a possibility should make clinicians pause before prescribing antipsychotics. This is not, however, to make a blanket argument against the use of antipsychotics. For some patients, particularly those with schizophrenia, they are essential if the patient is to have any sort of life at all. Their use however, in disorders responsive to other approaches, should be curtailed. For example, using antipsychotics in depression simply has little justification unless aggressive treatment with antidepressants fails to provide relief. In light of this, it would appear inappropriate to prescribe combination antidepressant and antipsychotic medicines (such as Etrafon or Triavil, both of which contain amitriptyline, an antidepressant, and perphenazine, an antipsychotic), unless it had been demonstrated that aggressive treatment with antidepressants or combinations of antidepressant drugs with Lithium had failed to work.

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C.T. Demonstration of Retroperitoneal Hematoma Caused by High Inguinal Arterial Puncture During Angiography

MAGDY ABASKARON, M.D., AND NETTIE KING, M.D.

A case of retroperitoneal mass discovered on CT examination of a patient who had two angiographic procedures is presented. The mass proved to be a hemorrhage caused by a high inguinal arterial puncture during angiography. The consideration of this etiology on the diagnosis of retroperitoneal, renal and posterior mediastinal tumors is stressed.

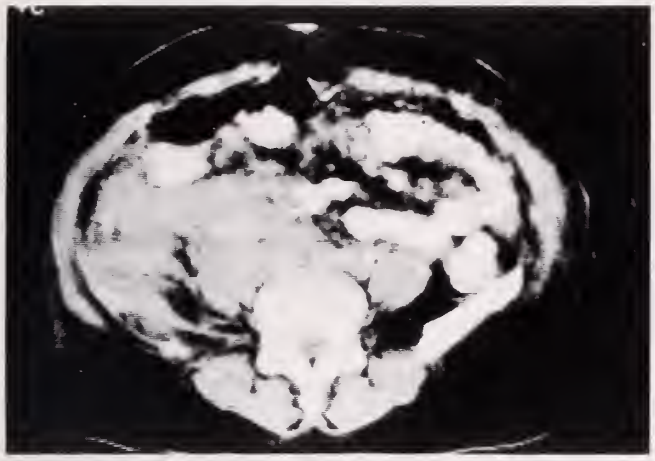
Computerized tomography and ultrasonographic examination of the abdomen are increasingly becoming fundamental for the work-up of many patients. In many instances these may follow an angiographic procedure. A case of a large retroperitoneal tumor caused by bleeding from high inguinal arterial puncture during angiography is presented.

Case Report

The patient is a 59-year-old female who presented with a two month history of numbness and weakness of the left arm, associated with dysphasia. The episodes lasted for two to 10 minutes and then resolved. She has had diabetes mellitus for at least eight years and hypertension for 10 years. The blood pressure has been controlled on Aldomet and Diuril. She had a myocardial infarction three years prior to this admission.

On examination her blood pressure was 180/70 mm Hg. A bruit was heard over the right carotid artery. A grade II systolic ejection murmur was also heard over the left parasternal region. Neurological examination showed no residual deficits. CT scan of the head revealed small areas of diminished attenuation in the right caudate nucleus and the left internal capsule, consistent with old lacunar infarcts. Her Hg was 11.7g, Hct 36.3, and blood sugar 197 mg. Chest x-ray was normal. EKG showed a normal sinus rhythm with left axis deviation. Cerebral angiogram showed complete occlusion of the origin of the right internal carotid artery. There was filling of the right internal carotid artery through the ophthalmic artery. Mild narrowing was not noticed at the bifurcation of the left common carotid artery. The patient was taken to surgery and right external carotid endarterectomy was done. Following surgery, there was persistent high elevation of the blood pressure. Excessive fluid intake, pheochromocytoma, or acute renovascular occlusion were considered. Abdominal aortography showed the renal arteries to be patent and no evidence of pheochromocytoma.

After the angiogram, there was a gradual drop in the blood pressure. The hemoglobin dropped from 11.7 to 9.3 in the 24 hours following angiography. Stools were negative for the presence of blood. Packed cells were infused. Emergency abdominal CT scan was ordered to rule out aortic dissection. The CT scan showed a large retroperitoneal mass extending from the right iliac fossa to the right perirenal fascia. (Fig. I, II). The mass was not homogenous with variable CT number and did not enhance on IV injection of contrast. Clinical examination as well as the review of the abdominal angiogram demonstrated that the arterial puncture was well above the inguinal ligament. Retroperitoneal hematoma secondary to high arterial puncture was diagnosed. The patient was treated conservatively. On her return to the clinic three months later, there was no evidence of abdominal mass.



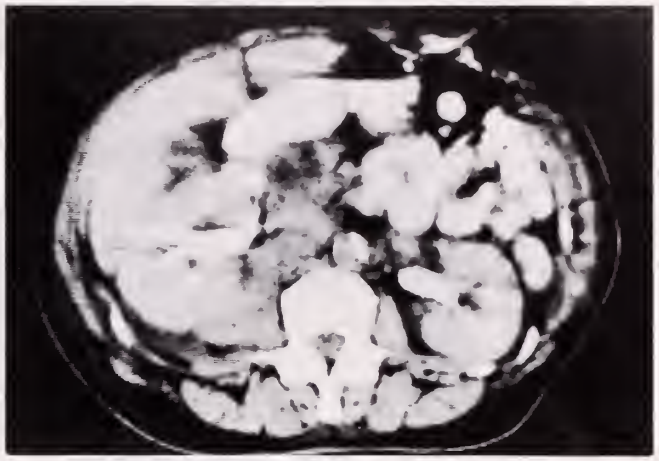


Fig. I & II: Large retroperitoneal mass extending from the iliac fossa to the perirenal space on the right side.

Discussion

Bleeding at the puncture site is not an uncommon complication in angiography. The incidence of its occurrence and the degree of its seriousness increase with the frequency of trial puncture, obesity and hypertension. Puncturing below the inguinal ligament is advisable because bleeding can be easily detected and hence controlled. The attachments of the inguinal ligament prevent the spread of the hematoma into the peritoneal or retroperitoneal spaces. On the other hand, a puncture above the inguinal ligament where the external iliac artery lies in the loose extraperitoneal, subserous fascia will allow blood to accumulate inconspicuously in the iliac fossa, beneath the parietal peritoneum. As there is free communication between the pelvic and abdominal subserous fasciae bleeding can extend into the retroperitoneal space.[1,2] In the recumbent position, which is routinely ordered after angiography, blood can permeate the subserous fascia, particularly in the groove between the psoas major and the quadratus lumborum muscles to reach the perirenal and pararenal spaces which are opened inferiorly.

A false diagnosis of retroperitoneal or renal tumor may be made from the CT or ultrasonographic examinations. With the increased utilization of these modalities, not only may erroneous diagnosis be made but unnecessary intervention may be undertaken.[3] This is especially true because bleeding is usually slow and may be associated with minimal symptoms. The history of a recent angiogram through the femoral route and the demonstration of the extension of a mass to the iliac fossa indicate the diagnosis. The mass characteristically increases in size near the iliac fossa.

There is evidence that bleeding in the iliac fossa occurs more often than recognized following high arterial puncture. This is particularly evident when taking into consideration the experience of the vascular surgeons who operate frequently following angiography. The frequency of sizable extension of the hematoma into the retroperitoneal cavity is not accurately known.

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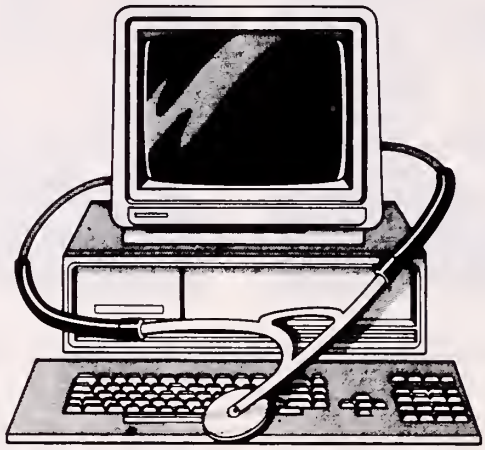

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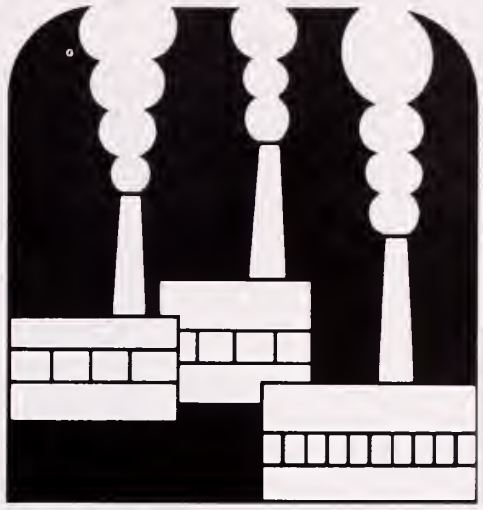
EDITORIAL

Nuclear demons have escaped from the cement vases at Chernobyl. Air now bears gusts of radioactive particles which easily settle on all that we cherish. No longer can rich farmland produce our eatables. Milk is scorned for what its producers may have masticated. People shed clothing that sets the Geiger in frenzy. Skin, an interface to the world, now may bear alien chemicals which convert cells to a pathological state. Lungs carry matter to deeper recesses, where life giving processes now must share their machinery with the enemy. Marrow, at our core, loses its vitality and affluence. Generations unconceived or unborn will bear marks if they are even able to see this world.

Now we find that Russian standards are softer and government dedication to safety is less than vigorous. Lest Three Mile Island be forgiven too soon, we as physicians must stand on the side of protection from harm. Though we can give the iodine, replace the marrow, comfort the skin with balms, predict the unborn with troubles, we cannot undo harm of this magnitude. Our Russian peers, I would believe, are no less dedicated. That their government is not as supportive can be read in lines of unhappy news. Spotting our land are many nuclear facilities, some on line, some approaching that ideal. To our near north, however, lays the Marble Hill wasteland, aborted by its own defective insides, its sick welds, contaminated cement and leaking pipes. Does such pathology affect other plants in not so faraway places?



Physicians have the perspective of science from our basic studies, of humanity from our patients, and of reality from our researchers. From that viewpoint, wholesale exorcism of our nuclear program is fickle. There may be no better suitor to satisfy our energy needs. But to respect human life which we dedicatedly preserve must be the cornerstone of nuclear building. Depending on our advances in medicine to salve nuclear wounds is to not understand our weaknesses against such a formidable foe.

Better to keep our beds empty as we are learning than to fill them unnecessarily.

Stephen Z. Smith, M.D.

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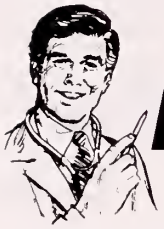

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Colonic Neoplasms
Hans Elias

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As the initial Piccin Tumor Atlas I published in an apparent planned series, this book gets off to a rough start. Although titled an "Atlas," the author has taken liberty throughout the book with his theories of oncogenesis. He does, however, support the learning of histology as a dynamic science to track the history of tumors.

Photomicrographs are of only fair quality, a number of which are blurred and unclear. A number of pages are completely occupied by a photomicrograph making an excellent learning tool.

What audience there is for this book I don't know, but students of colonic carcinoma would certainly benefit from reading and viewing the photomicrographs.

Angiographic Diagnosis of Supratentorial Cerebral Lesions (Compared with CT scan)
A. Pansini

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This Italian authored book represents an original study of a large number of cases angiographically studied pre- and postoperatively for precise localization of lesions. Emphasized is the fact that angiography reveals new blood vessel formation and the displacement of blood vessels by lesions.

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With the advent of the CAT scan, angiography was temporarily demoted, because CAT scans reveal topography and surrounding anatomy. This study reinforces angiography as a powerful and complementary tool to the CAT scan. Comparisons of both methods on individual cases culminates the book for emphasis and study.

Quality of photographs and diagrams is excellent with useful colored arrows for guidance. Captions accompany every illustration and are succinct and informative.

Several language differences spot the book, but are of no concern. Neurologists, neurosurgeons, radiologists and students will embrace this book for reference and learning.

Existence, Culture, and Psychotherapy
Clinton R. Meek

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Dr. Clinton Meek takes on modern psychotherapeutic technique. Methods of self help, including the use of a therapeutic journal are defined and demonstrated.

Essentially Dr. Meek sees the non verbal mind as healthy, natural and devoid of content and culture and symbols. The accumulation of culture — language and verbalization — disrupts one's connection with the purer mind and lead to psychopathology. Psychotherapy's charter is structuring the mind to recognize existence as dominant and movement toward the existential as therapeutic.

A *therapeutic journal* is the mechanism for directing movement toward existence.

Provocative and certainly definitive, this book is worth reading for another viewpoint.

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BUILDING A MEDICAL PRACTICE: THE NEXT STEP
Do Your Patients See What You See?

The first step in "Building A Medical Practice" (*KMA Journal*, June 1986) was evaluating your practice in terms of:

- Who are your patients?
- What is your competition?
- What are your personal/professional goals?

However, before you can proceed with a marketing plan, you must look at your practice through the eyes of your patients. The services and products you offer should satisfy their needs and wants in an ongoing and consistent manner.

Authors Thomas Peters and Robert Waterman, in *In Search of Excellence*, discovered that successful companies put their customer's needs and wants first, ahead of technology and ahead of cost. Their terms, "people-oriented" and "customer-driven," can apply just as well to a medical practice. Patients judge a physician's practice the same way consumers evaluate other goods and services - on outward appearance, manner of delivery and quality of the product.

The Patient Survey

One of the key tools you can use to evaluate your patients' perception of your practice is a patient survey. If conducted properly, it can provide an objective look at your practice strengths and weaknesses and become an integral part of your long-range planning.

An important aspect in doing a patient survey is to organize and tailor your research so that you obtain the information you desire. If you want to know **who your patients are** - age, education, occupation, location, family size - you may want to do a demographic survey which was discussed in detail in the June issue. If you wish to find out **what your patients think** - of your practice, your staff, your offices - you will want to do a patient attitude survey.

In order to evaluate this self-assessment tool, members of the KMA Committee to Investigate Changing Trends in Medicine conducted a survey of their patients using the sample form that follows. You may copy this form to use in a survey of your patients or you may wish to modify it to fit your particular practice needs. Areas covered in this particular survey include scheduling, telephones, accessibility, waiting time, facilities, office personnel, fees, and the patient's feelings about time spent with the physician.

Survey Techniques

Whether you use the sample form provided or one of your own, you will need to establish a method for conducting the survey. Survey techniques can be as complicated as surveying every *nth* patient or sampling according to the percentage of your patient mix (40% geriatric, 30% pediatric, *etc.*).

Probably the simplest, least expensive, and most convenient method is the one used by the Committee members. It involves handing the questionnaire to a pre-determined number of patients, either as they signed in or as they left the office. (If the latter is used, you will obtain better results if you make the survey a self-mailer or attach a return envelope). You can expect anywhere from a 60 to an 80% return using this method, which would reflect enough patient attitudes to make assessments of problem areas possible.

Other survey techniques, which may be more efficient for your particular practice include:

Telephone research - efficient and inexpensive; but less reliable and may not be acceptable to your patient population.

Direct mail - ability to sample a certain number of patients and not restrictive to those coming in for appointments; but more expensive, time-consuming and less return (30 to 40%).

Personal interview - ability for direct contact and highest return; but requires time commitment of staff and possibility for interviewer bias.

Whatever method you choose, in order for your survey to reflect an accurate evaluation, the sampling must be adequate in size and it must be representative of your overall practice. If your practice is well established, a good cross section would be 15 to 20% of your patients. For newer practices, you should probably survey at least five times the daily average of patient visits.

Most patients will be pleased that you have asked for their opinions and will feel that they are participating in a decision-making process if you let them know that they are helping you provide better and more efficient health care.

Survey Analysis

In tabulating the survey results, you should look for the responses that indicate a need for action. Since patients generally have high opinions of their doctor, interpreting negative responses varies. Public opinion pollster, O.A. Ham, President of Alternatives for Professionals, has established some benchmark patient disapproval ratings, which were published in *Medical Economics* (April 1, 1985).

On questions involving physician communication and/or friendliness, there should be no more than a 10% negative response. However, professional or technical competency questions should elicit a negative response from no more than 2% of the returns. Patient **disapproval** should not exceed 15% on questions concerning office staff, 5% on facilities, 25% on scheduling or waiting time questions, or 30% on questions regarding fees.

In evaluating the overall results of the survey conducted last year by some of the Trends Committee members, 98% of the patients responding were satisfied with the medical treatment they received. A large majority also appeared to be pleased with the doctors' availability, courtesy and willingness to answer questions. Patients seemed to have little complaint regarding office staffs, telephone management, facilities, and fees. In regard to waiting time, however, 22% of the patients noted that they had to wait more than 30 minutes. This is the only area that approached the above-noted disapproval rating of 25%.

Surveys' Role in Marketing

In addition to finding out patient attitudes, you might, at some point, want to do an informational survey which would help you gauge how much your patients know about your services. This survey could also serve as a marketing tool to let your patients know about your specialty, office hours and policies, as well as specific health care benefits you can provide. Results from this type of survey may point out the necessity of keeping your patients informed through a Patient Information Brochure or practice newsletter.

Conducting patient surveys - or in "marketing" terms - research and analysis, is one of the first steps in establishing a marketing plan and is an essential part of "building a medical practice."

If you would like help in tailoring a survey to fit your individual needs or would like samples of other survey forms, please contact the KMA Office.

PATIENT QUESTIONNAIRE

We want to provide you and your family with the highest quality health care possible. To help us evaluate our effectiveness, we would like your comments on services provided by me and the rest of the staff. All responses are anonymous. Please use this opportunity to respond freely. After filling out the questionnaire, please return it to the receptionist's desk or mail it to the office.

1. Why did you first decide to seek medical treatment in this office?
   - ☐ near home or business
   - ☐ referral by another patient
   - ☐ referral by another physician
   - ☐ referral by local medical society
   - ☐ telephone listing
   - ☐ other _____

2. Was it easy to get an appointment?
   ☐ Yes ☐ No
   If no, please explain _____
   _____

3. When you last called the office:
   a. Was the phone answered promptly? ☐ Yes ☐ No
   b. Were you put "on hold"? ☐ Yes ☐ No
   c. Was the line busy? ☐ Yes ☐ No
   d. Were you treated courteously? ☐ Yes ☐ No

4. Was parking conveniently located? ☐ Yes ☐ No

5. How far did you drive to reach the office? _____Miles

6. When you arrived at the office, how long after your scheduled appointment did you have to wait before seeing the physician?
   - ☐ less than 15 minutes
   - ☐ 15 to 30 minutes
   - ☐ more than 30 minutes

7. What is your general impression of the office itself?
   - ☐ beautiful
   - ☐ nice
   - ☐ typical
   - ☐ shabby

8. During your visit, how were you treated by members of the office staff?
   - ☐ pleasantly
   - ☐ indifferently
   - ☐ coldly

9. Please rate the physician on how genuinely interested he or she seems to be in you as a person:
   - ☐ always seems interested and concerned
   - ☐ usually seems interested and concerned
   - ☐ sometimes seems indifferent
   - ☐ never seems to have enough time for me

10. During office visits, is your illness and the treatment recommended adequately explained by the physician?
    ☐ Yes ☐ No
    If no, how could this be improved? _____
    _____

11. Does the physician adequately answer your questions?
    ☐ Yes ☐ No

12. Were you satisfied with the medical treatment you received?
    ☐ Yes ☐ No
    If no, please explain _____
    _____

13. At your last visit, was the fee itemized and clearly explained to you?
    ☐ Yes ☐ No

14. Do you feel the fee for this visit was appropriate for the services rendered?
    ☐ Yes ☐ No
    If no, please explain _____
    _____

15. Did you receive adequate assistance in filling out your insurance form?
    ☐ Yes ☐ No

16. Any other comments? _____
    _____
    _____

Thank you for your help in this matter.

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KMA Committee Studies Professional Liability Crisis

Carl Cooper, Jr., M.D., Bedford, Chairman of the ad hoc committee on Physician Liability Insurance.

The KMA ad hoc committee on Professional Liability Insurance met on May 21 with members of KMA's Executive Committee to respond to the liability insurance crisis and to discuss a preliminary draft of a campaign plan to continue efforts begun during the 1986 Kentucky General Assembly. This plan builds on past House of Delegates policy and will be used to develop further action for the Association through the 1988 General Assembly.

From left to right: Danny M. Clark, M.D., Somerset, 12th District Trustee; Bob M. DeWeese, M.D., Louisville, Fifth District Trustee; Carl Wedekind, President and CEO, KMIC; Carl Cooper, Jr., M.D., Chairman; Bill Doll, KMA staff; Doris Crume, KMA staff; Robert G. Cox, KMA EVP; Wally O. Montgomery, M.D., Paducah, KMA President and Richard F. Hench, M.D., Lexington, KMA President-Elect.

Richard F. Hench, M.D., KMA President-Elect.

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Membership Recruitn

Wally O. Montgomery, M.D., KMA President.

Richard F. Hench, M.D., KMA President-Elect

KMA Phonathon

Following last year's successful Phonathon, four KMA Executive Committee members met on the evening of April 2 to call members who had not yet renewed their membership this year. Doctors Wally O. Montgomery, Richard F. Hench, Nelson B. Rue, and Donald C. Barton, who made a combined total of 89 calls, felt this effort gave them the opportunity to talk to individual members across the state about issues of mutual concern.

Nelson B. Rue, M.D., KMA Board Chairman

Donald C. Barton, M.D., KMA Vice President

ıent Efforts Underway

Alternate Trustee Campaign

"Making Our Voice 5000 Strong" is the theme for the membership recruitment campaign which will be spearheaded this summer by KMA's Alternate Trustees. Goals have been set in each District to contact every nonmember physician and to increase District membership by 5%.

Under the direction of KMA Membership Committee Chairman Harold D. Haller, Sr., M.D., the Campaign will run from June 1 through September 15 and those Districts meeting their goals will be recognized at the 1986 KMA Annual Meeting. Listed below are the Campaign Chairmen for each District and you are urged to contact them to assist in this effort.

1st – James S. Gwinn, Jr., M.D., Paducah
2nd – John W. McClellan, M.D., Henderson
3rd – N. H. Talley, M.D., Princeton
4th – Amar Desai, M.D., Elizabethtown
5th – E. Dean Canan, M.D., Louisville
6th – J.Michael Pulliam, M.D., Franklin
7th – Cecil L. Martin, M.D., Carrollton (Trustee)
8th – Donald J. Swikert, M.D., Florence
9th – Robert L. McKenney, M.D., Falmouth
10th – Thomas K. Slabaugh, M.D., Lexington
11th – William H. Mitchell, M.D., Richmond
12th – David C. Liebschutz, M.D., Danville
13th – Charles T. Watson, M.D., Ashland
14th – James R. Pigg, M.D., Pikeville
15th – Rufino F. Crisostomo, M.D., Barbourville

Alternate Trustees (l to r) Robert L. McKenney, M.D., (9th); Rufino F. Crisostomo, M.D., (15th); and Thomas K. Slabaugh, M.D., (10th) discussed the Membership Recruitment Campaign with Chairman Harold D. Haller, Sr., M.D., at a meeting at the KMA Headquarters on May 28th.

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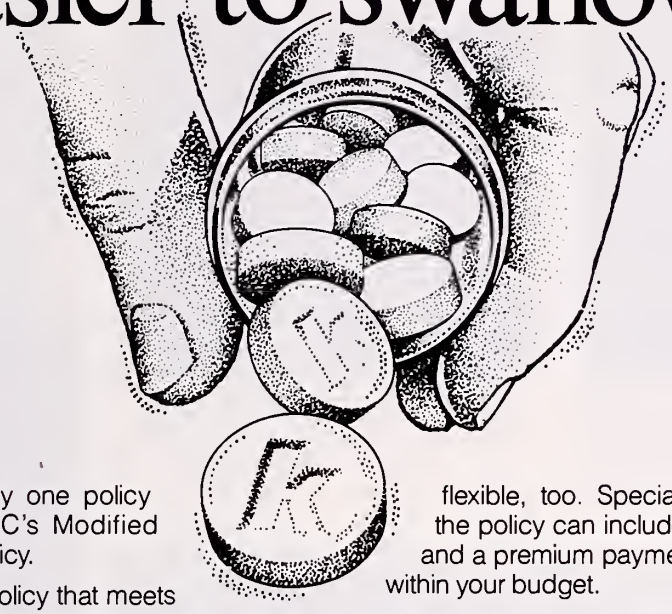

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Trustee Meetings KMA's Legislative

Seven Trustee meetings have been conducted or are scheduled throughout the state through June. The remaining seven districts are expected to meet prior to the KMA Annual Meeting. Wally O. Montgomery, M.D., President of KMA, has been guest speaker at all of the well attended events. The theme of the Trustee meetings and topic has been "KMA's Legislative Response to the Malpractice Issue." The meetings have featured explanations and events surrounding the 1986 Kentucky General Assembly and specific legislative voting records during the 1986 Session. Doctor Montgomery pointed out that only 9% of Kentucky physicians participate in KEMPAC.

Kelly G. Moss, M.D., Maysville, 9th District KMA Trustee is shown responding to questions at the recent meeting of the District.

Jerald M. Ford, M.D., Ashland, Trustee of the KMA 13th District presides over the recent meeting attended by a large crowd at Belefont Country Club in Ashland.

Wally O. Montgomery, M.D., President of the KMA, was guest speaker at the Maysville 9th District Trustee Meeting.

Mrs. Lamar (Eloise) Meigs (left), Boyd County AKMA AMA-ERF Chairman, was recently honored at the 13th District Trustee Meeting in Ashland. Boyd County ranked second in the U.S. in per capita contribution to AMA-ERF and received first place in Kentucky. Shown with Mrs. Meigs is Mrs. Kenneth (Ginny) Hauswald (center), Boyd County Auxiliary President, and Mrs. Gary (Sue Ann) Barker, AKMA Eastern Region Vice President and immediate past County President.

Response to Malpractice Issue

Wally O. Montgomery, M.D., President of KMA, responds to questions regarding the recent legislative activities. Montgomery was guest speaker at the 12th District Trustee Meeting.

Danny M. Clark, M.D., 12th District Trustee, presided over the annual District Meeting in Somerset on May 22.

Stephen Kiteck, M.D., President of Pulaski County Medical Society and host for the 12th KMA District Meeting introduced various guests and conducted Society activities prior to the District Meeting.

Hossein Fallahzadeh, M.D., Somerset surgeon, discussing the malpractice problem and its effect on patient-physician relationships.

Orville Stein, M.D., Somerset, family physician and Wally O. Montgomery, M.D., President of the Kentucky Medical Association at the 12th KMA District Meeting on May 22 in Somerset.

CME Committee Meets to Review Administrative Changes

James E. Redmon, Jr., M.D., Louisville, chairs a joint meeting of the CME Committee and CME Council.

A joint meeting of the Continuing Medical Education Committee (CME) and CME Council was held on May 28 to discuss CME accreditation activities. Following a review of KMA's accreditation authority by the Accreditation Council on Continuing Medical Education, a number of administrative changes to the process were considered.

Routine resurveys of a number of institutions KMA has accredited were considered and a survey of the process by which KMA provides CME courses directly will be requested of the ACCME.

The CME Committee has the responsibility for accrediting institutions to provide their own CME activities. The CME Council helps organizations provide individual programs through cosponsorship and is responsible for providing credit to KMA programs. The ACCME is the national accrediting authority for CME and is composed of several member organizations including the AMA and the American Hospital Association.

Physician Manpower Committee Studies Trends for Physician Services

Physician Manpower Committe Chairman Robert P. Goodin, M.D., (right) Louisville, and Gorden T. McMurry, M.D., Louisville, review manpower data.

The Physician Manpower Committee was charged by the House of Delegates to study the rate of production of physicians and the current and future needs for physician manpower.

At its May 22 meeting, the Committee reviewed a number of information sources for manpower data in an effort to accumulate statistics relevant to the study. At an early stage it was learned that several organizations have some responsibility for aspects of physician manpower, and the Committee was fortunate in securing the cooperation of the state Council on Higher Education and the Health Manpower Development Section of the Department for Health Services, as well as both medical schools.

A number of interesting facts and trends have surfaced which the Committee will report to the House of Delegates in September.

Doug Bishop (left) with the Department for Health Services and Larry Fowler with the Council on Higher Education provide information and advice to the Physician Manpower Committee.

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RICHARD R. SLUCHER, M.D.
Louisville
1905–1986

Richard R. Slucher, M.D., Past President of KMA (1956–57), died May 4 at his home in Prospect. Doctor Slucher graduated from the University of Louisville School of Medicine in 1930 and practiced internal medicine in Buechel for more than 30 years. A native of Anderson County, Doctor Slucher interned at the Louisville General Hospital and from 1931–35 he served a residency in medicine at the General Hospital and Long Island College and Hospital in New York. He was a Navy veteran of World War II and Past President of the Jefferson County Medical Society, the Kentucky Academy of General Practice and the staff of the Kentucky Baptist Hospital. He is survived by his wife, the former Emma Hood.

HUGH L. HOUSTON, M.D.
Murray
1908–1986

Hugh L. Houston, M.D., Murray, Past President of KMA (1949–50), died on April 23. Specializing in Internal Medicine and Geriatrics, Doctor Houston practiced for more than 50 years and is considered one of Kentucky's most distinguished physicians. He received his pre-med degree from the University of Kentucky and graduated in 1933 from Vanderbilt University Medical School in Nashville, TN.

Doctor Houston was one of the founders of the Rural Kentucky Medical Scholarship Fund administered by the KMA to encourage physicians to practice in rural areas. He was also active in the American College of Chest Physicians and served on the Board of Directors of Kentucky Blue Cross and Blue Shield.

Doctor Houston's father, the late Edward Brent Houston, was one of Calloway County's earliest physicians. Hugh Houston and his father were in practice together and after his father's death, Doctor Houston and his brother, the late Hal Houston, Sr., M.D., helped organize the Houston-McDevitt Clinic and Hospital.

He is survived by his wife, Hontas Kelly Houston, and a nephew, Hal Houston, Jr., M.D., a surgeon on the staff at Murray-Calloway County Hospital.

SURE!

A Tribute to Sam Alvin Overstreet, M.D.

Sam Overstreet was many things to many people—companion/family man, Marine/Navy commander, golfer/gardener, teacher/educator, benefactor/supporter, essayist/journalist/author, medical statesman—and his death at 89 years of age on 30 April 1986 caused his significant life events and multiple accomplishments to be recorded with respect and admiration in local and national newspapers, medical journals and in his own church bulletin.

Sure he was a devoted husband detailing the attributes of Irma, his wonderful wife of 61 years in a humurous and complimentary book by the same name; sure he nurtured and groomed his three sons to follow him appropriately and successfully in medical practice (all gastroenterologists); sure he was President of several hospital medical staffs, county and state medical societies; sure he served as Editor of this journal from 1966 to 1970 and provided erudite-incisive editorials aplenty and insured the quality of its clinical content; sure he was instrumental in the building and early management of the Methodist Evangelical Hospital in Louisville and a prime mover in the controversial efforts that established the University of Kentucky Medical Center and College of Medicine in Lexington; sure he was the visionary preservationist for the University of Louisville old School of Medicine building that is pridefully a historic landmark, community health center and museum; sure he was Professor of Medicine at his own medical school, one of the founding fathers of the American Society of Internal Medicine and Governor for Kentucky of the American College of Physicians; sure he quietly financially supported several poor and minority students through seminary and medical school and launched many young physicians on a successful career from a small consultation-examining room (rent free) in his office complex; sure he could spin a good yarn of rural Kentucky, tell a funny joke and join warmly in the resulting laughter; and sure by the stature of his presence and ever vigorous activities he enhanced the science, art, and dignity of his profession. Sure too he will be sorely missed by the community of this Commonwealth; sure his passing will be mourned by many and his shoes will not be filled soon, easily or fully.

John S. Llewellyn, M.D.

Kentucky Medical Association Annual Meeting September 22-25, 1986

SCIENTIFIC SESSIONS

The Ramada Inn East and Convention Center, Louisville, will host the 1986 Annual Meeting. The Scientific Program Committee has invited speakers from across the nation to address this year's theme on "The Aging Patient."

Please make a special note to remember that this year all general scientific sessions will be held during the mornings only of Sept. 23, 24 and 25, with specialty groups meeting during each of those afternoons.

SPECIALTY GROUPS

Programs for 20 specialty groups will be held during the afternoons of Sept. 23, 24 and 25. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be held in the Ramada Inn East & Convention Center.

CME CREDIT

Physicians attending general sessions and specialty group meetings will qualify for 13½ hours of Category I Credit.

KMA HOUSE OF DELEGATES

The opening meeting of the House of Delegates will be held Monday, Sept. 22, at 9 a.m. in the Julia Belle Room of the Convention Center. Reference Committee meetings will begin at 2 p.m. on Monday and the final meeting of the House will begin at 6 p.m., Wednesday, Sept. 24. Officers for the 1986-87 Associational year will be elected during the final House meeting.

PRESIDENT'S LUNCHEON

This year's guest speaker during the President's Luncheon on Wednesday, Sept. 24, is **John J. Coury, Jr., M.D.**, AMA President. The Luncheon will also include presentations of KMA awards and the installation of the 1986-87 KMA President Richard F. Hench, M.D.

OTHER ACTIVITIES

The Annual **KEMPAC Seminar** will be held Monday, Sept. 22, at the Bluegrass Convention Center. A reception begins at 6 p.m. with dinner at 7 p.m. The **Second Annual McDowell/Crawford Ball** is scheduled during the Annual Meeting. Details will be available soon. **Scientific and Technical Exhibits** will be on display featuring new medical products, services and techniques. Members and guests have an opportunity to visit this area during the 30 minute intermissions scheduled throughout the general sessions and specialty group meetings.

"The Aging Patient" 1986 KMA Annual Meeting

Reminder of Program Change

Specialty Group meetings will be held three afternoons during this year's Annual Meeting.

Afternoons of September 23, 24 and 25 will be reserved for specialty groups with General Scientific Session programs scheduled each morning at the Ramada Inn East and Convention Center.

Nominations Being Accepted for Three Annual KMA Awards

Nominations are being accepted for three awards which are presented each year at the KMA Annual Meeting to outstanding physicians and lay people.

Nominees for the Educational Achievement Award are chosen from citizens of the Commonwealth of Kentucky who have made a significant contribution in medical or medically related education. Contributions in all areas of teaching, research, clinical application of medical practice and/or patient education are factors that will be considered. Recipients are chosen by the Continuing Medical Education Committee.

The Distinguished Service Award is presented each year to a physician in the state who has contributed to organized medicine or individual medical service, community health or civic betterment and medical research or distinguished voluntary military service. The nominee may qualify on any one or a combination of these points.

The Kentucky Medical Association Award is presented to an outstanding lay person in honor of his or her outstanding accomplishments in the field of public health and/or medical care. July 15 is the deadline for receiving nominations. Recipients of the Distinguished Service Award and the Kentucky Medical Association Award will be chosen by the Awards Committee.

Nominee material should include background and historical information about the nominee as well as justification for the nomination.

The McDowell/Crawford Ball will be held Sunday September 21, 1986 at the Embassy Room, Hilton East, Louisville

Invitations and RSVP cards will be mailed

CLASSIFIED

All advertisements must be approved by the Board of Editors. Deadline is the first of the month two months preceding the month of publication. Charges for advertising are: 20¢ per word. Average word count: 7 words per line. $5.00 minimum. Send payment with order to: The Journal of KMA, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

FOR SALE: Clay Adams Sodium/Potassium Analyzer. Model 4900. Used very sparingly for six months. New cost $4,000. $2,500 or best offer. Call 606/278-8421.

USED MEDICAL EQUIPMENT: Exam tables, stools, lamps, leaded x-ray shield on rollers. D. Chatham, M.D., 615 Washington Street, Shelbyville, KY 40065. Phone: 502/633-3525.

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Office Space and/or Equipment Available July 1, 502-Broadway, Lawrenceburg, Ky. LAWRENCEBURG: 45 minutes to Watterson Expressway, Louisville, KY. 30 minutes to New Circle Road, Lexington, KY. 15 minutes to Frankfort, KY. Office space for lease in three year old medical building with three other doctors' office suites. 2100 square feet of office space. Present lease has seven years remaining or owner will negotiate new lease. Present lease is $5.00 per square foot annually. The office space is available with or without equipment and supplies. Office is fully equipped and stocked with medical and office supplies. These are available for lease, lease purchase, or direct purchase with or without financing. Over 3,000 active accounts approximately 6,000 - 8,000 patient charts these will remain in office if desired. Equipment includes x-ray, EKG, limited laboratory, 3 fully equipped examining rooms, 1 fully equipped minor surgery and procedure room. Contact: P.O. box 348, Lawrenceburg, KY 40342.

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The program pays dividends that vary according to the yearly claim costs for this professional class. Part of the premium is returned as a dividend when claims expenses are low for those participating.

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Harold L. Bushey, M.D., Barbourville, KEMPAC Board Chairman, has announced the appointments by the KMA Board of Trustees of the following physicians to serve on the KEMPAC Board of Directors:

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The AMA is in favor of cost-effectiveness, but not at the expense of quality care—or physicians' freedom to provide it. So we're acting, not reacting—by delivering cost-effectiveness information at special workshops and annual meetings; by offering publications including the Physician's Cost Containment Checklist; and by launching programs, such as the Cost-Effectiveness Network for hospital staffs to test cost-effectiveness strategies, and the Health Policy Agenda for the American People, a long-range set of directions and priorities for health care.

In Washington, D.C., and in court, we're fighting government-imposed fee freezes and other attempts to restrict the rights of physicians and patients.

You can fight back—by joining the AMA. Together, we'll help make sure that quality wins—every time.

For information, call toll-free 800/621-8335 (in Illinois, call collect 312/645-4987), or return this coupon to:

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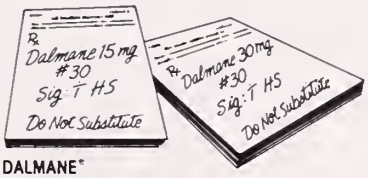
References: **1.** Kales J, *et al: Clin Pharmacol Ther 12*:691-697, Jul-Aug 1971. **2.** Kales A, *et al: Clin Pharmacol Ther 18*:356-363, Sep 1975. **3.** Kales A, *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **4.** Kales A, *et al. Clin Pharmacol Ther 32*:781-788, Dec 1982. **5.** Frast JD Jr, DeLucchi MR. *J Am Geriatr Soc 27*:541-546, Dec 1979. **6.** Dement WC, *et al: Behav Med*, pp. 25-31, Oct 1978. **7.** Kales A, Kales JD: *J Clin Psychopharmacol 3*:140-150, Apr 1983. **8.** Tennant FS, *et al*: Symposium on the Treatment of Sleep Disorders, Telecanference, Oct 16, 1984. **9.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977.



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Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patients to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Withdrawal symptoms rarely reported, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase, and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients*: 15 mg recommended initially until response is determined.

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Please see preceding page for summary of product information.

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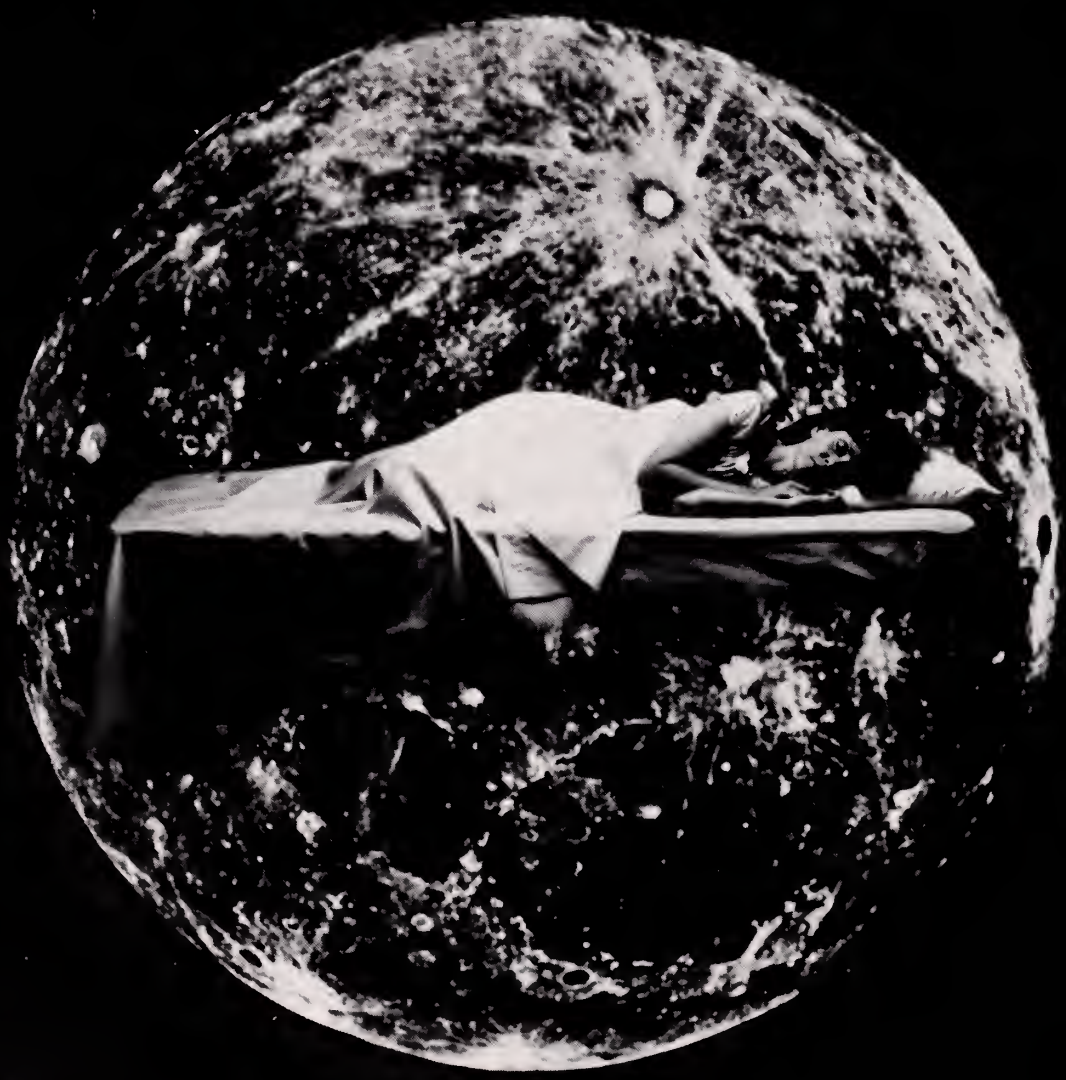

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"The Aging Patient"

1986 KMA Annual Meeting

Volume 84, Number 8

August 1986

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KMA-Gram

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Plus, an additional **10% premium experience credit** is applied, guaranteed until February 1, 1987 STOP

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PRESIDENT'S PAGE

There is nothing wrong with our profession that can't be corrected . . .

We are privileged to belong to the greatest profession in the world, medicine. For centuries our profession has held the esteem and provided the leadership for the world. Now we are being assailed by forces throughout: government intervention, lawsuits, public distrust (just a bunch of money grabbers) etc. Is it the profession's fault? No, but it is our fault. We have sat on our collective behinds and allowed it to happen. We have taken care of our patient's and have done it well, but we have not taken care of our profession or our communities.

How many of you just pay your dues to KMA and do nothing else? Do you belong to the AMA or KEMPAC? Do you volunteer to work for your organization or just let someone else do it? I have heard every excuse man can think up (we are an intelligent profession) and that's exactly what they are, excuses. What if our forefathers, from Hippocrates on down, would have taken the attitude that many of us have? How many of you continue to teach your colleagues on a day to day basis? (Some of us need it.)

Have you ever served your city in government? Do you work on any city commission? The bankers and other city leaders all do. Do you belong to the Chamber of Commerce of Industrial Commission? Do you do charity or other volunteer work in your community? Do you become involved in our political system or is it beneath you?

Well, so far, I've asked a lot of questions, but I hope I rang a bell with a few of you. I know we all can't be a "man for all seasons," but we can give more of ourselves to our profession and our communities. There is nothing wrong with our profession that can't be corrected if we would dedicate ourselves to improve ourselves, getting involved in our organizations and communities, and give of our God given talents that have been bestowed upon us. The next time you are asked to join or get involved don't make excuses. If you don't like it, get in and change it.

Donald C. Barton, M.D.
KMA Vice President

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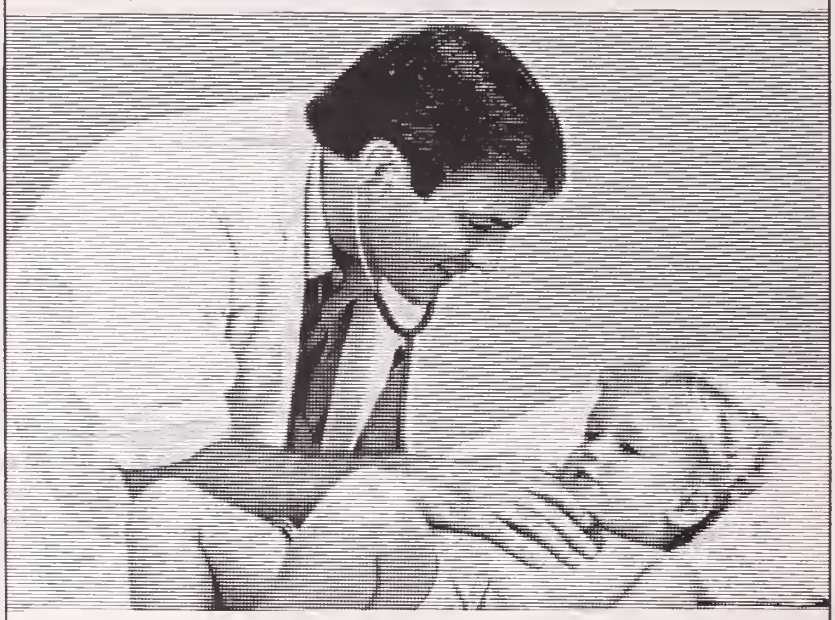

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ARMY RESERVE. BE ALL YOU CAN BE.

CONTROL ACID RAIN

with once-a-night h.s. therapy for active duodenal ulcers

Now, one tablet at bedtime

Controls nocturnal acid to relieve pain and heal duodenal ulcers

Heals active duodenal ulcers after 4 weeks in most patients*[1]

ZANTAC 300 mg h.s.	270/320	84%
ZANTAC 150 mg b.i.d.	292/345	85%

In well-controlled, double-blind, multicenter trials, ZANTAC 300 mg h.s. healed active duodenal ulcers in 84% of patients after 4 weeks. After 8 weeks, healing rates may be higher with ZANTAC 150 mg b.i.d. (92%) than with ZANTAC 300 mg h.s. (87%).

Relieves pain and other symptoms as effectively as ZANTAC 150 mg b.i.d.[1]

Zantac® 300

ranitidine HCl/Glaxo 300 mg tablets

Once-daily dosing may enhance compliance in patients for whom dosing convenience is important

Side-effects profile comparable to ZANTAC 150 mg b.i.d.[1-3]

Headache—sometimes severe—has been reported. Rare effects on the CNS, cardiovascular, GI, hepatic, and integumental systems have been observed, as well as rare cases of hypersensitivity reactions. See ADVERSE REACTIONS section of Brief Summary of Product Information before prescribing.

No significant interference with the hepatic cytochrome P-450 enzyme system at recommended doses

ZANTAC 300 mg h.s. had no significant drug interactions with theophylline or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH may be altered when ZANTAC or other medications which decrease gastric acidity are administered.

**It is not known exactly how much acid inhibition is needed to heal ulcers.*

Glaxo / ROCHE

See next page for references and Brief Summary of Product Information.

IN ACTIVE DUODENAL ULCERS

Once-a-night h.s. therapy controls acid rain

Zantac® 300
ranitidine HCl/Glaxo 300 mg tablets

References: 1. Data available on request, Glaxo Inc. 2. Ireland A, Colin-Jones DG, Gear P, et al: Ranitidine 150 mg twice daily vs 300 mg nightly in treatment of duodenal ulcers. *Lancet* 1984;2:274-275. 3. Colin-Jones DG, Ireland A, Gear P, et al: Reducing overnight secretion of acid to heal duodenal ulcers. *Am J Med* 1984; 77 (suppl 5B):116-122.

ZANTAC® 150 Tablets
(ranitidine hydrochloride)
ZANTAC® 300 Tablets
(ranitidine hydrochloride)

BRIEF SUMMARY OF PRODUCT INFORMATION

INDICATIONS AND USAGE: ZANTAC® is indicated in:
1. Short-term treatment of active duodenal ulcer. Most patients heal within four weeks. Studies available to date have not assessed the safety of ranitidine in uncomplicated duodenal ulcer for periods of more than eight weeks.
2. Maintenance therapy for duodenal ulcer patients at reduced dosage after healing of acute ulcers. No placebo-controlled comparative studies have been carried out for periods of longer than one year.
3. The treatment of pathological hypersecretory conditions (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of active, benign gastric ulcer. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated. Studies available to date have not assessed the safety of ranitidine in uncomplicated, benign gastric ulcer for periods of more than six weeks.
5. Treatment of gastroesophageal reflux disease. Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer; active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

CONTRAINDICATIONS: ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

PRECAUTIONS: General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy.
2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function (see **DOSAGE AND ADMINISTRATION**). Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

Laboratory Tests: False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Drug Interactions: Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day.

Ranitidine was not mutagenic in standard bacterial tests (*Salmonella, E coli*) for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

Pregnancy: ***Teratogenic Effects: Pregnancy Category B:*** Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: ZANTAC is secreted in human milk. Caution should be exercised when ZANTAC is administered to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Use in Elderly Patients: Ulcer healing rates in elderly patients (65 to 82 years of age) were no different from those in younger age groups. The incidence rates for adverse events and laboratory abnormalities were also not different from those seen in other age groups.

ADVERSE REACTIONS: The following have been reported as events in clinical trials or in the routine management of patients treated with oral ZANTAC®. The relationship to ZANTAC therapy has been unclear in many cases. Headache, sometimes severe, seems to be related to ZANTAC administration.

Central Nervous System: Rarely, malaise, dizziness, somnolence, insomnia, and vertigo. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

Cardiovascular: Rare reports of tachycardia, bradycardia, and premature ventricular beats.

Gastrointestinal: Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain.

Hepatic: In normal volunteers, SGPT values were increased to at least twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid IV for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

Musculoskeletal: Rare reports of arthralgias.

Hematologic: Rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Endocrine: Controlled studies in animals and man have shown no stimulation of any pituitary hormone by ZANTAC and no antiandrogenic activity, and cimetidine-induced gynecomastia and impotence in hypersecretory patients have resolved when ZANTAC has been substituted. However, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Integumental: Rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia.

Other: Rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

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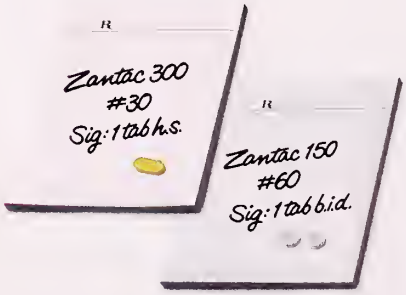

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Accidental Deaths in the Aged by Protective Devices

BARBARA WEAKLEY-JONES, M.D. AND JOHN WERNERT, B.A.

Some accidents in nursing homes are due to improper application or use of protective devices. Posey or vest restraints have long been recognized as a danger. We report three cases in which restraints were directly responsible for patient death.

Case Reports

Recently we have noticed in our practice of forensic pathology an alarming increase in deaths associated with protective devices. Of nursing home accidental deaths which we have investigated, three have been directly related to protective devices. These deaths occurred within a three month period and in all three cases, the Posey or vest restraint was the type of device involved. Two of the patient's (one male and one female) died of asphyxia by ligature strangulation where the vest restraint was the ligature. The third patient died as the result of postural asphyxia.

Case number one involved an 86-year-old male who had been secured with a vest restraint in a wheelchair, which he manipulated with his feet to move freely around the nursing home. This patient had not been seen for several hours, and when found, he had fallen asleep and slid down in his chair with the vest restraint still in place, creating pressure on his neck. Autopsy revealed an 8" ligature abrasion of the anterior neck. Pretechial hemorrhages were noted on the face and eyes, starting at the level of the ligature abrasion. The hyoid bone was fractured on the left side. The brain showed moderate cerebral cortical atrophy.

Case number two involved an 80-year-old female who had been secured in a lounge chair in her room with a vest restraint. Her body was discovered with the vest restraint compressing her neck. She also had slipped down in her seat and died of ligature strangulation. The autopsy in this case revealed a ligature abrasion of the neck. Petechial hemorrhages were also noted. The hyoid bone was intact, however soft tissue hemorrhage was noted in the area of the ligature abrasion. The brain showed moderate to severe cerebral cortical atrophy with moderate atherosclerosis of the vertebral and basilar vessels.

Case number three involved a 65-year-old female who had been restrained in her bed with a vest restraint. She managed to partially crawl out of the bed, dragging the bed across the floor. She was found dead, partially hanging from the bed, immobilized by the restraint. The autopsy in this case, failed to show ligature abrasion or petechial hemorrhages. No significant disease process was identified in the internal organs except for the brain. The patient had a previous left temporal craniotomy with clipping of a saccular aneurysm of the left middle cerebral artery. This procedure resulted in extensive infarcts of the left parasylvian cortex and right parietal lobe creating aphasia in the patient. No anatomical or toxicological cause of death was present. Death was attributed to postural asphyxia as a result of a chest restraint.

Discussion

The field and body of scientific knowledge known as geriatrics grows daily due to the ever increasing awareness of special problems of the elderly by the medical community. Some strides are being made in the care and health maintenance of the elderly.

The New York State hospital code states that "The hospital and or nursing facility has a moral obligation to provide sick and injured patients with a protective environment, one free of risks of accidental injuries and deaths."[2] Physical impairments inherent in the condition of the aged increase their direct and indirect potential for accidents and injuries. It is important to recognize that patients in homes for the aged and other long term care facilities may have impaired sight and hearing, failing muscular strength, decreased reaction time, diminished coordination, altered range of motion and mental abilities. Thus, they can not be expected

to react swiftly or cope adequately in a strange or restrictive environment.

If a home or institution fails to adequately provide safeguards, "the accident which befalls such an individual will most likely be charged as inadequate care," thus establishing a civil tort liability.[3] By this tenet blame for accidents occurring in geriatric centers can not be placed on the patient as the operators of a facility may claim. Rather these institutions must take proper precautions and provide care to safeguard the institutionalized aged.[1]

Accidental deaths are infrequent in relation to natural deaths occurring in nursing homes. Accidental deaths include injuries from falls, cutaneous burns from hot water, heat lamps and heating pads; asphyxia related deaths when choking on food; exposure (hypothermia) when a disoriented patient wanders outside and becomes lost; accidental drug overdose; and mechanical deaths associated with defective bed rails and improperly placed or defective protective devices.

In an article discussing accidental risks in nursing home patients, Irving Ladimer J.D., lists the five D's in housing, Design, Discipline, Drugs, Device and Diet. The design or physical environment is the most commonly named defect when discussing accidents. Yet more lethal on a percentage basis are the devices used by the staff in an attempt to keep patients from harming themselves. These include Posey jackets or harnesses, belt restraints and general extremity restraints. These devices have long been recognized as dangerous, "yet necessary evils" in geriatric medicine.

The use of physical restraints and restrictive devices in nursing homes is an infrequently discussed but often tolerated maneuver. It should be noted that the common "PRN" medical order delegates to the nurse the decision to use restraints, and provides neither guidelines for nursing judgement or identification of the situation for usage. The random use of restraints and the discrepancies in nursing judgement as to how and when to apply the devices presents many unpredictable variables that may increase the accidental rate for these patients who are already at risk.

In one study recording 203 incidents/accidents reported in single study year within a nursing home, a substantial number, 61.6%, of all patients were involved in an incident/accident when **not** wearing restraints which had been ordered. The incident/accident reports may not represent a physical injury to the patient. A surprising number of incident/accidents, 16% occurred in restrained patients as the result of knocking over chairs, falling out of chairs, moving or becoming tangled while in a restraint.

In the Commonwealth of Kentucky, regulations for the use of restraints or protective devices have been established by the Cabinet for Human Resources.[8] No form of restraint or protective device may be used without written order from an attending physician. In an emergency, they may be used but only for a period not to exceed 12 hours. Restraints can only be applied by trained personnel. The restraints should be checked at least every one half hour and released at least 10 minutes every two hours. These checks or releases of restraints should be recorded in the patient's medical records. The restraints should not be used as a punishment, as a convenience for the staff, or as a mechanism to produce regression. These regulations were implemented before the three reported fatalities occurred. In each case, the institution had not fully carried out these requirements.

It is difficult to assess how many incidents or accidents are due to defective technique in restraint application by the medical and nursing staff. Additionally, the numbers of defective devices in use is unknown. However, the responsibility (and liability) for patient injuries sustained with the use of restraints is clearly a professional one. It is a responsibility that must be addressed by the attending physician when a geriatric patient is institutionalized. The physician must establish criteria for ordering restraints, and must insure that the institution supplies training in the application of restraints and observation of patients who are restrained.

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Patients Rights in Psychiatric Treatments
(and how to avoid malpractice)

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All patients have the right to refuse treatment and a right to receive treatment. These rights apply to voluntary and involuntary patients alike. Dangerous psychiatric patients can be treated against their will in emergency circumstances. Non-emergent dangerousness in a psychiatric patient can be treated only by court order. Close attention to patient rights, use of informed consent procedure, and careful record keeping provides physicians with medico-legal protection as well.

The rights of psychiatric patients have emerged into public view during the past few years. These rights include the right to refuse treatment and the right to receive treatment.[1,2,3,5] Physicians are challenged by patients and their lawyers if therapies are administered without informed consent. Frustration ensues when a floridly psychotic patient becomes agitated and dangerous, but refuses all reasonable modes of treatment. A related issue is the mandate to fulfill the "right to treatment, *ie* one cannot be hospitalized without provision of appropriate therapies.[4] There are a growing number of malpractice suits based on alleged patient rights violations.[4,6,9] The following two clinical vignettes should guide physicians in appropriate actions and how to avoid being sued for violation of patient's rights, while administering quality care to a difficult group of patients.

Case #1: A 35-year-old man was admitted under a Mental Inquest Warrant because of threats to kill a neighbor. Threats were mediated by the patient's paranoia and acknowledged auditory hallucinations. He was agitated, loud and verbally threatening to the staff and other patients. Overt assaultiveness characterized his past history when in a psychotic state. The diagnosis was Schizophrenia, paranoid type. When antipsychotic medication was to be administered, the patient became physically aggressive, threw the medicine and refused all treatment.

Case # 2: A 45-year-old man was hospitalized because of bizarre behavior. He masturbated in public, set fires in his apartment, and was walking on railroad tracks in response to auditory hallucinations. On admission the patient was calm and cooperative, but delusional and actively hallucinating. Suicide intent was denied. He remained quiet and did not bother anyone. Anti-psychotic medication was prescribed but refused, allegedly because "God told him not to take medicine."

Clinical Action

Case #1 typifies the dangerous behavior of some agitated, psychotic patients. By Kentucky statute, patients, even committed ones can refuse all treatment; however, in the presence of an emergency situation, restraints and medication, even given parenterally, can be administered forcibly against the patient's will.[7,8,11] An emergency is defined as a situation where the individual is an immediate risk for harming himself or others or is in such an impaired physical or mental condition that he is unable to give consent. In such a case, with clear documentation, a physician is justified in treating the patient without informed consent. Acceptable psychiatric emergency treatment consists only of physical restraints and medications, but specifically the statute excludes electroconvulsive therapy, psychosurgery or sterilization.[9,10,12] Forced treatment is warranted only during the overt emergency.[6,7,12]

Case #2 demonstrates a quietly psychotic patient. There was no emergency at that moment, however, the patient needed treatment to alleviate psychotic symptoms and he had been dangerous in his apartment. Such a case calls for a "de novo" action or court ordered treatment. To initiate a "de novo" proceeding, the institution must create a Hospital Review Committee which evaluates a proposed treatment plan.[11,12] The committee is composed, by law, of three qualified mental health

specialists appointed by the Hospital Director.[11,12] Then within three days, the committee meets with the patient and his counsel to determine (1) whether medication is necessary to protect the patient and/or others from harm; (2) whether the patient is capable of giving consent; (3) whether less restrictive modes of treatment exist; and (4) whether proposed medication carries risk of permanent side effects. Within seven days a court hearing is required. If the judge decides that imposing medication is justified, a court order is issued to that effect.

Discussion

Fresh concerns about the rights of the mentally ill emerged in the early sixties with the civil rights movement. This patient rights movement was spearheaded among physicians by Doctors Thomas Szasz and Morton Birnbaum.[2] Szasz attacked treatment imposed against a person's will, especially hospitalization.[14] He championed the idea that people labeled mentally ill have a right to treatment choice. Birnbaum recommended treatment as the only justification for depriving an ill person of their freedom, arguing that "a mental institution that hospitalized a person without giving adequate treatment is functioning as a prison."[14] The declared purposes of the patient's rights movements are to protect mentally ill people and to encourage better patient care. Areas related to patients' rights mandate that other rights also be protected: the right to confidentiality, the right to vote, freedom from censorship, and freedom to enter into a contract.[1]

A landmark court case for the right to treatment was Rouse V. Cameron, litigated in 1966.[4] Charged with a crime, Rouse had been declared not guilty by reason of insanity and hospitalized. Rouse claimed that since he was not receiving treatment in the hospital, that he should be discharged. The judge ordered his release, stating that "detention without treatment is like incarceration for no wrong doing." In 1976, the American Psychiatric Association defined treatment to include: "intervention of a psychological, biological, physical, chemical and educational or social nature wherein the individualized treatment plan is assumed to have a reasonable expectation of improving the patient's condition."

These rights apply to both voluntary and court committed patients. The right to know and discuss their treatment plan is provided under the right to be adequately informed. Even when patients are under court commitment, their right to refuse treatment is maintained unless a dangerous emergency situation arises.

Obtaining consent for treatment is an essential step in the initiation of any therapy. In order for informed consent to be valid, patients should understand the nature of their condition, the proposed treatment, alternative therapies, the risks and benefits of both and the consequences of not undergoing treatment.[12] A written or signed informed consent is expected **only** for invasive procedures, experiments or otherwise unconventional therapies.

The present system places the patient and physican in an adversary position with delay of care being everyone's loss. It is a paradox that patients who have been determined to be dangerous to themselves or others can prevent the administration of routine treatment. It is a greater paradox that they render the hospital an institution which curtails their freedom, but is prevented from restoring their health. Should the patients then be discharged? No, discharge is not reasonable if immediate danger still exists. Further, it would be unethical and inhumane and raises the issue of patient abandonment.

On the practical level what can the physician do? First, it is the duty of the doctor to attempt to establish a relationship with the patient to obtain voluntary cooperation. This is not easily done with psychotic patients, particularly on a first contact. Family or friends may be helpful in this regard. If these efforts fail it is still the physician's duty to protect patients and others from harm as much as possible and to protect patient dignity. The physician should then take the legal steps of initiating a "de novo" hearing or to encourage the family to obtain an emergency guardianship through a competency hearing. Unfortunately both of these actions are time consuming, and frequently the patient's condition deteriorates and an emergency situation develops. The physician should then intervene and administer care forcibly. Once the emergency is under control, medication can be given again only if the patient agrees, if another emergency occurs or if the court orders that the patient be medicated. In our experience, once patients are medicated under emergency circumstances they usually voluntarily comply with further care.

In conclusion, all physicians must rigidly attend to all statutory requirements of patient rights. The legal restraints placed on our practice are well intentioned and are useful in detering past abuses, when mental patients were afforded few rights. Physicians must develop a patient-doctor relationship and know that involuntary treatment is not a routine practice. Prompt medical care unfortunately is sometimes delayed by sta-

tutory requirements. The legal and psychiatric professions should open communications to change laws which presently are at odds with principles of sound medical care and people's rights to receive it.

The best protection for physicians is their ability to establish patient rapport. Complete records are also recommended. When recourse to legal action is the only possible avenue, careful documentation of the patients condition, the steps taken for care and their rationale, will be the basis for the defense should a litigation against the physician occur, and be the basis for court ordered treatment in the "de novo" determination as well.

Acknowledgement

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A Reassessment of Hilar and Mediastinal Lymphadenopathy in Patients with Sarcoidosis

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Intrathoracic lymphadenopathy is common in sarcoidosis. Patterns of lymph node enlargement which should suggest a possible diagnosis of sarcoidosis include bilateral hilar lymphadenopathy, either as an isolated finding or in combination with enlarged mediastinal lymph nodes, and enlargement of any three or more intrathoracic lymph node groups. This would allow a correct suspicion of sarcoidosis in 83% of patients with sarcoidosis who present with intrathoracic lymphadenopathy. As diffuse pulmonary parenchymal disease appears the lymphadenopathy involutes, occasionally in a haphazard manner, which may leave the patient with atypical patterns of lymphadenopathy. Therefore, in any patient with diffuse interstitial, alveolar, or nodular patterns in the lungs, the presence of any combination of hilar or mediastinal lymphadenopathy should suggest the possibility of sarcoidosis. Once lung disease is established, the appearance of any new hilar or mediastinal mass should suggest superimposed bronchogenic carcinoma, lymphoma, or metastatic disease.

Hilar and mediastinal lymphadenopathy have been reported to occur in a large number of patients who have thoracic involvement by sarcoidosis;[1] in half of the patients who demonstrate enlarged intrathoracic lymph nodes, lymphadenopathy will be the sole radiographic abnormality; in the other half of the patients with intrathoracic lymphadenopathy there will be associated pulmonary parenchymal sarcoidosis.[2]

The diagnosis of sarcoidosis based upon the radiographic appearance of the enlarged intrathoracic lymph nodes alone is difficult at best and is usually not possible. The presence of massive, bilaterally symmetric hilaar lymphadenopathy resembling "tubers" or "potato nodes," once thought to be virtually pathognomonic for sarcoidosis, is rare and may occasionally occur in patients with lymphoma. Lesser degrees of bilateral hilar lymph node enlargement are less suggestive of sarcoidosis and raise lymphoma, metastatic neoplasms, and certain infections, including primary tuberculosis and fungal disease, as diagnostic possibilities.

The 1-2-3 sign, consisting of symmetrical right and left hilar lymph node enlargement associated with enlargement of the right paratracheal lymph nodes, has been highly touted as a sign of sarcoidosis; however, this sign may also occur in lymphoma, metastatic disease, tuberculosis, and fungal infections. In fact, lymphadenopathy in sarcoidosis frequently extends to involve the left paratracheal lymph nodes as well, especially those nodes residing in the aortic-pulmonic window.[2,3] In addition, subcarinal, anterior mediastinal, and posterior mediastinal lymphadenopathy have also been reported to occur rather frequently in patients with sarcoidosis.[3,4,5] Still, even when extensive intrathoracic lymphadenopathy is present, the radiographic picture is not specific for sarcoidosis. When unusual manifestations such as unilateral hilar lymphadenopathy,[1] or isolated mediastinal lymphadenopathy[6] occur in sarcoidosis, the radiographic appearance is more suggestive of lymphoma, primary lung carcinoma, or metastatic disease.

We recently undertook a retrospective study of 42 patients with thoracic sarcoidosis in order to evaluate the occurrence and distribution of hilar and mediastinal lymphadenopathy. Common combinations of lymphadenopathy and radiographic patterns which should heighten the suspicion of sarcoidosis will be discussed.

Materials and Methods

The study group consisted of 44 patients who met the following three criteria: 1) tissue biopsy demonstrating noncaseating granulomas, 2) negative cultures for

TABLE I

EXTENT OF INTRATHORACIC LYMPHADENOPATHY IN 35 PATIENTS WITH ENLARGED NODES FROM SARCOIDOSIS

No. of node groups involved	No. cases (n = 35)	%
1	4	11
2	8	22
3	15	43
4	5	14
5	2	6
6	1	3

tuberculosis and fungal organisms, and 3) a clinical picture compatible with sarcoidosis. Tissue confirmation of noncaseating granulomas was made from skin biopsy in three cases, extrathoracic lymph node biopsy in three cases, mediastinoscopy in 12 cases, transbronchial biopsy in 18 cases, open lung biopsy in seven cases, and percutaneous needle biopsy in one case.

The chest radiographs of the 44 patients were reviewed and evaluated for the presence or absence of hilar and mediastinal lymphadenopathy. When lymphadenopathy was present, the number and combination of involved lymph groups were recorded. The presence or absence of intrathoracic lymphadenopathy was also correlated with the presence or absence of interstitial, alveolar, or nodular pulmonary parenchymal sarcoidosis.

Results

Nine of the patients in the study group had pulmonary parenchymal sarcoidosis but showed no evidence of hilar or mediastinal lymphadenopathy. The remaining 35 patients showed enlargement of one or more intrathoracic lymph node groups; the incidence of lymphadenopathy in these 35 patients is summarized in Figure 1.

Right hilar lymphadenopathy occurred in 91% (32 of 35) of these cases, left hilar lymphadenopathy occurred in 77% (27 of 35), right paratracheal lymphadenopathy in 51% (18 of 35), aortic-pulmonic window lymphadenopathy in 49% (17 of 35), subcarinal lymphadenopathy in 14% (five of 35), anterior mediastinal lymphadenopathy in 3% (one of 35) and posterior mediastinal lymphadenopathy in 3% (one of 35). As can be seen from Figure 1, the incidence of left paratracheal lymphadenopathy (aortic-pulmonic window lymphadenopathy) was virtually identical to the incidence of right paratracheal lymphadenopathy.

In Table I the extent of intrathoracic lymphadenopathy in the 35 patients with enlarged lymph nodes is recorded. Four patients (11%) had lymphadenopathy isolated to a single lymph node group, and eight patients (22%) had lymphadenopathy limited to two lymph node groups. The vast majority of patients (66%) demonstrated enlargement of three or more lymph node groups, therefore, a greater extent of intrathoracic lymphadenopathy with involvement of three or more lymph nodes groups should increase the suspicion of sarcoidosis (Figure 2).

In Table II the combinations of enlarged lymph node groups encountered in the 35 patients are listed. Combined right and left hilar lymphadenopathy occurred as isolated findings in six cases (17%), right and left hilar

TABLE II

COMBINATIONS OF LYMPHADENOPATHY ENCOUNTERED IN 35 CASES OF SARCOIDOSIS

No. of node groups	Combination	No. of cases
1.	R hilum	3
	L hilum	1
2.	R and L hilum	6
	R hilum, AP window	2
3.	R and L hilum, R paratracheal	5
	R and L hilum, AP window	4
	R and L hilum, subcarinal	1
	R hilum, R paratracheal, subcarinal	1
	R hilum, R paratracheal, AP window	2
	L hilum, R paratracheal, subcarinal	1
	L hilum, R paratracheal, AP window	1
4.	R and L hilum, R paratracheal, AP window	5
5.	R and L hilum, R paratracheal, AP window, subcarinal	1
	R and L hilum, R paratracheal, AP window, posterior	1
6.	R and L hilum, R paratracheal, AP window, Subcarinal, anterior	1

TABLE III

COMPARISON OF LYMPHADENOPATHY AND PULMONARY PARENCHYMAL SARCOIDOSIS

	Parenchymal Sarcoid	
Node group	NO (n = 13)	YES (n = 31)
R hilum	12 (92%)	20 (65%)
L hilum	11 (85%)	16 (52%)
Mediastinum:	12 (92%)	13 (42%)
R paratracheal	6 (46%)	12 (39%)
AP window	9 (69%)	8 (26%)
Subcarinal	2 (15%)	3 (10%)
Anterior	0 (0%)	1 (3%)
Posterior	1 (8%)	0 (0%)

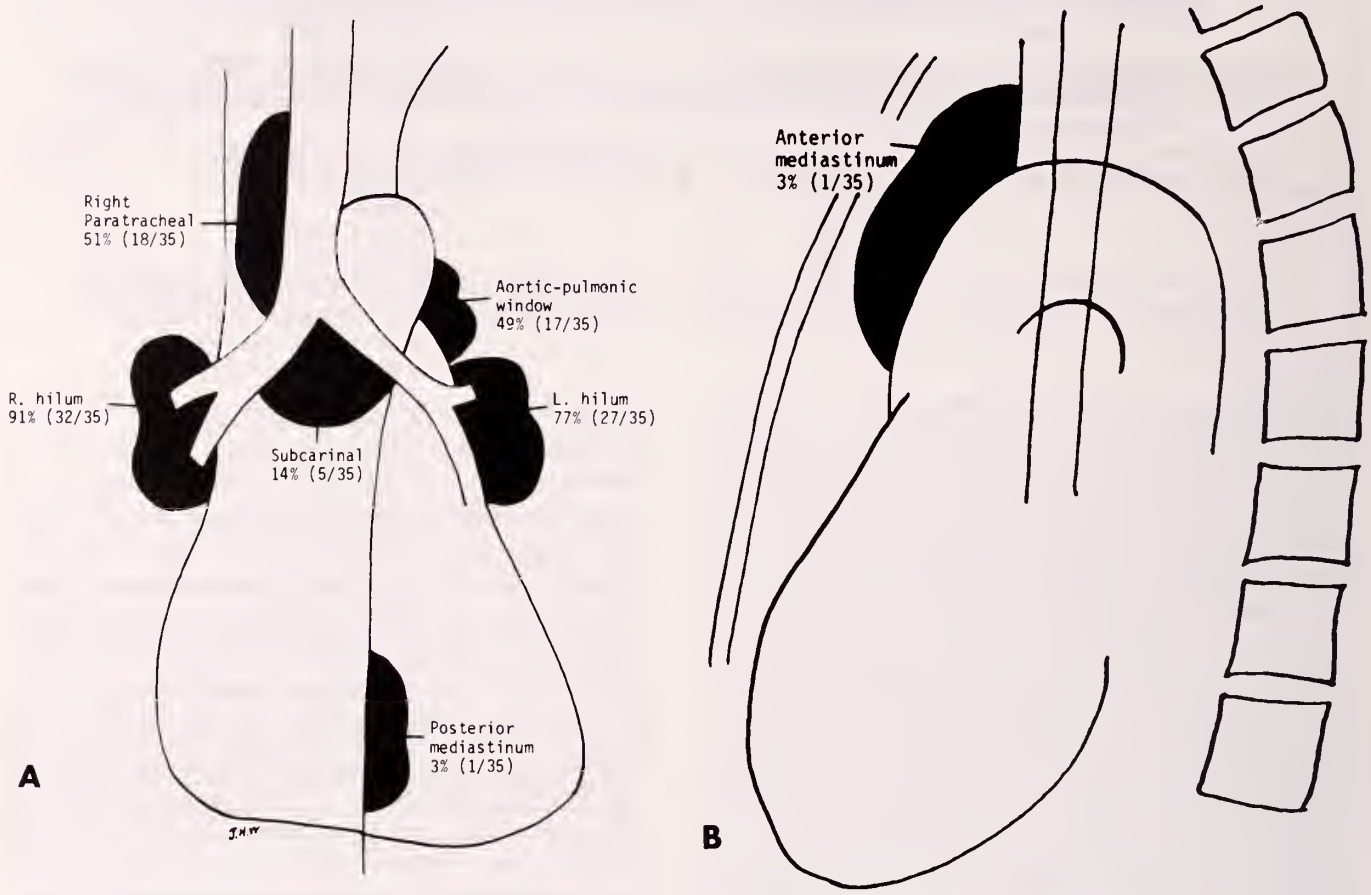

Figure 1: Incidence of intrathoracic lymphadenopaathy in 35 patients with enlarged nodes from sarcoidosis.

lymphadenopathy associated with right paratracheal lymphadenopathy (1-2-3 sign) occurred in five cases (14%), right and left hilar lymphadenopathy combined with right paratracheal and aortic-pulmonic window lymphadenopathy occurred in five cases (14%), and combined right and left hilar and aortic-pulmonic window lymphadenopathy occurred in four cases (11%) making these the most commonly encountered patterns of lymphadenopathy in our patients. It can be seen that no one pattern is seen with any great frequency, and even if all four of these patterns were considered together, the correct diagnosis of sarcoidosis could be suspected in only 56% of cases. Returning to Table II, it can be seen that bilateral hilar lymphadenopathy was present in 24 of 35 patients (69%) as either an isolated finding or in association with some combination of mediastinal lymphadenopathy (Figures 3 and 4). In addition, three of more lymph node groups were involved in 23 of 35 patients (66%). If both of these findings were combined, that is, either intrathoracic lymphadenopathy limited to or including bilateral hilar lymphadenopathy or enlargement of any three or more intrathoracic lymph node groups, a correct suspicion of sarcoidosis could be made in 29 of 35 patients (83%).

It is of interest that massively enlarged bilateral hilar "tubers" or "potato nodes" (Figure 3), considered by some to be virtually pathognomonic of sarcoidosis, were found in only two cases (6%) making this one of the least commonly encountered patterns of lymphadenopathy in our patients.

In Table III the lymphadenopathy is compared to the presence or absence of interstitial, alveolar, or nodular pulmonary parenchymal sarcoidosis. In patients without radiographically detectable parenchymal sarcoidosis there is a very high incidence of bilateral hilar and mediastinal lymphadenopathy. With the advent of pulmonary parenchymal disease there is a dramatic drop in the incidence of lymphadenopathy. As the enlarged lymph nodes involute there may be a haphazard clearing of lymphadenopathy which leaves behind unusual patterns of intrathoracic lymphadenopathy (Figure 5). All four cases of isolated unilateral hilar lymphadenopathy in our series occurred in patients with diffuse pulmonary parenchymal sarcoidosis. Also, one of the two

Figure 2: Right paratracheal, aortic-pulmonic window, and left hilar lymphadenopathy in sarcoidosis (arrows). This case illustrates the principle that enlargement of any three or more intrathoracic lymph nodes should suggest a diagnosis of sarcoidosis.

cases of combined right hilar and aortic-pulmonic window lymphadenopathy occurred in a patient with diffuse pulmonary disease. This suggests that, in any patient with diffuse interstitial, alveolar, or nodular patterns in the lungs, the presence of any enlarged hilar or mediastinal lymph nodes should suggest the possibility of sarcoidosis.

Discussion

A diagnosis of sarcoidosis usually requires the demonstration of noncaseating granulomas in at least one body tissue, negative cultures for tuberculosis and fungal organisms, and clinical evidence of multiple organ involvement.[1,2,7] Lymphadenopathy has been reported in a high percentage of patients with sarcoidosis and can, therefore, be a helpful finding in supporting the clinical diagnosis of the disease. Although sarcoidosis is in the differential diagnosis any time there is enlargement of one or more hilar or mediastinal lymph nodes, the diagnosis of sarcoidosis is often difficult to suspect prospectively on chest radiographs because of the varied and nonspecific nature of the radiographic findings.

When intrathoracic lymphadenopathy is identified radiographically in a young person, often black, who is relatively asymptomatic or who demonstrates other features of the disease such as anergy, hypercalcemia, uveitis, and/or erythema nodosum with only slight systemic illness, sarcoidosis is easier to suspect. Massively enlarged bilateral hilar lymph nodes ("potato nodes" or "tubers") and the 1-2-3 sign have been reported to be very suggestive of sarcoidosis; however, these signs are not present in most cases, and, in fact, the lymphadenopathy in sarcoidosis is frequently more pleomorphic and extensive than this in nature. The results of our study indicate that a correct suspicion of sarcoidosis as a cause for intrathoracic lymphadenopathy could be made more often if the following two patterns of lymphadenopathy were considered to be characteristic of sarcoidosis, that is, bilateral, symmetric hilar lymphadenopathy, either as an isolated finding or associated with any combination of mediastinal lymphadenopathy, and enlargement of any three or more intrathoracic lymph node groups.

Figure 3: Massively enlarged bilateral hilar lymph nodes (arrows) resembling "tubers" or "potato nodes." Bilateral hilar lymphadenopathy always suggests the possibility of sarcoidosis, however, the diagnosis is more certain when the hilar lymphadenopathy attains this massive size bilaterally.

Despite the massive size that the hilar and mediastinal nodes may attain in sarcoidosis, bronchial obstruction secondary to compression by the enlarged nodes is rare. Atelectasis has been reported to occur in only 0.5 to 1% of cases.[1] Rarely, the enlarged nodes may compress the pulmonary arteries causing a decrease in perfusion of the lungs.[8]

Calcification of the lymph nodes is a late manifestation of sarcoidosis that may be seen in approximately 5% of cases;[1] occasionally the calcification resembles

Figure 4: More extensive lymphadenopathy in sarcoidosis consisting of bilateral hilar, right paratracheal, and aortic-pulmonic window lymphadenopathy (arrows). Note diffuse reticulonodular pattern in right lung.

the "egg-shell" calcification seen in silicosis and, occasionally, in histoplasmosis.

Early in the course of the disease, patients with sarcoidosis frequently demonstrate enlargement of the hilar and/or mediastinal lymph nodes with no radiographically detectable pulmonary parenchymal disease. Followed over time, these patients will either show progressive clearing of the lymphadenopathy with their chest radiographs returning to normal or they will show the progressive appearance of diffuse interstitial, alveolar, or nodular pulmonary parenchymal disease. Almost without exception, as the lung disease appears, the intrathoracic lymphadenopathy progressively resolves. Eventually the patient may be left with diffuse pulmonary sarcoidosis without any evidence of hilar or mediastinal lymph node enlargement. This regression of lymphadenopathy may occur in a haphazard manner leaving the patient with unusual patterns of intrathoracic lymphadenopathy. Although the presence of diffuse interstitital, alveolar, or nodular lung disease associated with unilateral hilar or predominant or isolated mediastinal lymphadenopathy is often considered to be more suggestive of diagnoses such as hematogenous or lymphangitic metastases, lymphoma, and other granulomatous diseases such as tuberculosis, fungal infections, and silicosis, sarcoidosis should still be considered as a possible diagnosis in these circumstances.

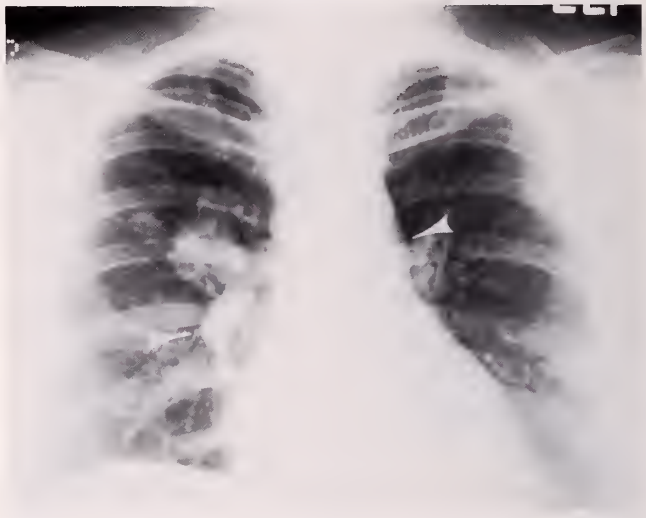

Figure 5: This patient demonstrates subtle right hilar and aortic-pulmonic window lymphadenopathy (arrows) associated with large bilateral pulmonary nodules originally thought to represent metastatic neoplasm. Final diagnosis was the nodular form of sarcoidosis.

There is, however, no evidence in the literature to indicate that hilar or mediastinal lymphadenopathy ever develops in sarcoidosis after pulmonary parenchymal disease is established.[1,9] In any patient with diffuse pulmonary sarcoidosis, the appearance of any new hilar or mediastinal mass should trigger an intense search for underlying bronchogenic carcinoma, lymphoma, or metastatic disease.[9]

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Excellence

I'm surprised at how many of my classmates are retiring; scarcely 40 years out of Medical School and already they hang it up, right in their prime! Sure, the old collagen isn't as snappy at it was. Enzymes waver, lumens constrict, follicles fail — but this is comment, not complaint. Life is good. Most of us are mellower, a little wiser, still taking nourishment in several kinds. We cringe at the memories of error. We are quietly, privately pleased to recollect some small triumph. We spend more time remembering because there's more now to remember and it takes longer anyway. We'd not go back and do it again even if permitted hindsight. With hindsight we'd only make the same mistakes more largely.

So, along with our creaks, comes the right to make some choices, choices about things and thoughts and people. What once seemed terribly important may now be reassessed, more objectively one hopes. Once upon a time I gazed at my environment and saw things that needed changing and some things are changing, but I'm changing, too. For example, I once thought that dandelions could be expunged from the lawn. Now I'm just thankful that they are green and mow easily. Occasionally I even eat one. We coexist. Once I thought to influence those Health Care Professionals* who refer to patients as "clients." Now I settle for coexistence. Once I had thought that simple self-interest and experience would persuade Carriers** not to hire clerks to make life and death decisions on 800 lines. Now I meekly call, implore, and exude gratitude when they are kind. I'm learning a lot about coexistence.

Well, in these exciting times it came to pass that a valued physician associate attended a National Meeting and was given a bracing lecture on the future by a Very Knowledgeable and Influential Politician who had dramatically announced to the assemblage: "Doctors must forget quality of care — it's already assured. Now it's the bottom line that counts!" Back in the Doctors' Lounge we listened gloomily to his report and were not astonished; we've heard this decree by bureaucrats, that Quality can be assured if only we have a Quality Assurance committee. This is false. Here I will not coexist. Good Quality in Medicine will never be imposed by fiat. Excellent care happens when determined and conscientious healers do their best and the care may be excellent even when results aren't perfect.

The Bottom Line folks are not always impressed with talk of Excellence. We have heard, "Don't talk about excellence — you can't even define it." This is false too. Even in these conforming, compromising, coexisting times we must not endorse such statements even with silence. We know this premise is false. The concept of excellence is not all that slippery.

- Excellence is loving and respecting the Healing Arts.
- Excellence is loving and respecting those marvelous, flawed people, all made in God's image, that we are privileged to treat.
- There is excellence in knowing how to perform an intricate procedure perfectly and in knowing when *not* to perform it.
- Excellence has more to do with judgment than with skill, with attitude more than with equipment.
- A skillful, mindless preservation of life may not be excellence even when it is accomplished at prodigious effort and cost with marvelous techniques and nationwide television exploitation. The attitude which says, "I just save'em — I'm not playing God!" has little to do with God or the patient or healing or dignity or social responsibility — or excellence.

We are assured that dramatic Changes are speeding Medicine on into the New Age. We have excellence in technique, procedure and gadgets with more of the same on the way. We have excellent fee schedules ranging from ample upwards. We are invited, even compelled, to join intricate and presumably excellent practice associations so that they can negotiate a fee reduction for us, all in the hope of survival. Changing ethical standards let those who choose jostle with chiropractors in television advertising. Such changes speak vaguely and unconvincingly of excellence and we most devoutly hope that they will move us toward excellence — but we will be astonished if they do. They will certainly cost a great deal more, all in the name of economy and bottom lines.

So we will acknowledge that the Carriers are bored with talk of excellence and we know that some so-called Providers are too, but the physician does not have to join in. Still, there is an entropy affecting Medicine and I wonder if today's graduates know this, can sense that all about them substance is being changed to heat.

I wish we could have a conference on excellence addressed by those who know what it is, addressed by mature, bright, expressive people, by healers and patients, by theologians and philosophers, all dubious about the concepts of actuaries or stockholders or administrators. I would hope that the bottom line people and the politicians might come and sit down front and listen because, in a paradoxical way, they might be able to learn how to make money from excellence even if they haven't yet understood it.

David L. Stewart, M.D.

**Generic term, available over-the-counter*
***Bottom Line Persons*

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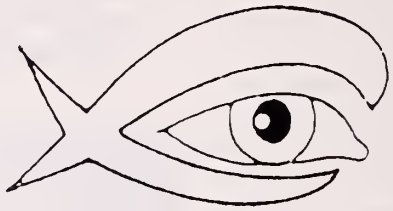

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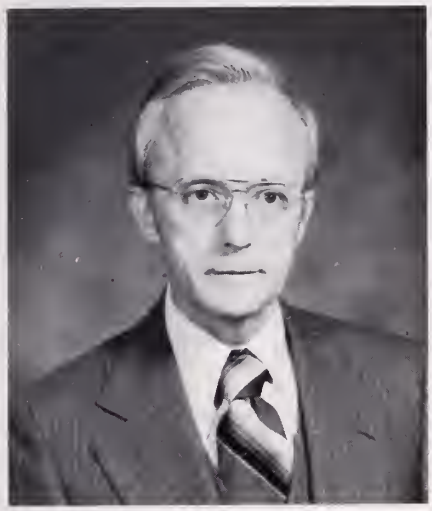
Thomas R. Watson, M.D., a board-certified obstetrician-gynecologist has been nominated by the Jefferson County Medical Society for KMA Vice-President. Doctor Watson received his medical degree in 1961 and did his internship and residency at the University of Louisville. He is also a clinical assistant professor at the University of Louisville and has served as president of Hospice of Louisville, Inc. for two years. Doctor Watson has served as the JCMS Delegation Chairman to KMA for four consecutive years and President of KEMPAC for two years. He also served on the JCMS Judicial Council and currently serves on the KMA State Claims and Utilization Review Committee.

Doctor Watson

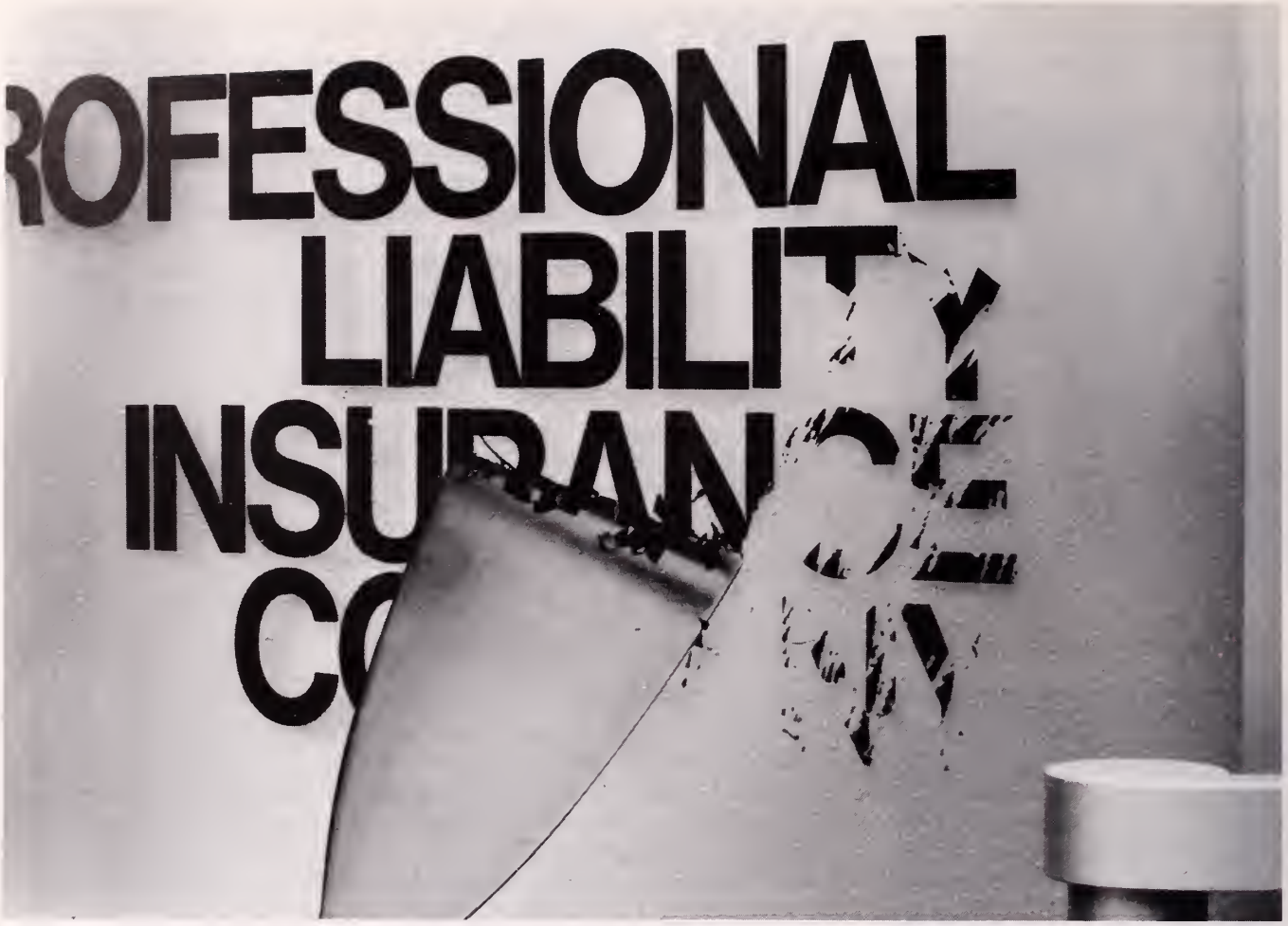


Kenneth P. Crawford, M.D., a board-certified pediatrician from Louisville, has been nominated by the Jefferson County Medical Society for AMA Delegate. Doctor Crawford received his medical degree from the University of Louisville in 1946. He did his internship and residency at St. Joseph Infirmary and served as Captain in the U.S. Army. Doctor Crawford served as an instructor and assistant clinical professor of pediatrics through the University of Louisville. He has been an active member in many professional society organizations including the Louisville Pediatric Society, Alternate Delegate to the Kentucky Medical Association from 1977 to present, and secretary of the JCMS Board of Governors. He has also been involved with many community and civic related activities.

Doctor Crawford

Robert R. Goodin, M.D., a board-certified specialist in cardiovascular diseases, has been nominated by the Jefferson County Medical Society for AMA Alternate Delegate. Doctor Goodin received his medical degree from the University of Louisville in 1964. He did his internship and residency at Barnes Hospital in St. Louis and a fellowship at Emory University. He served as Medical Epidemiologist for the U.S. Public Health Service at the National Communicable Disease Center in Atlanta. He has also served in many academic positions through the University of Louisville and currently serves as Clinical Associate Professor of Medicine and Director of the Cardiac Catheterization Laboratory. Doctor Goodin has served as President of the Jefferson County Medical Society and as a member of the Board of Governors. He is also an active member of several professional and scientific societies.

Doctor Goodin



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1986 Annual Meeting Section

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Official Call
KMA Annual Meeting

To the officers and members of the component and county medical societies of the KMA.

Meeting Place

The Annual Meeting of KMA will convene on Tuesday, Wednesday, and Thursday, September 23, 24, and 25 at the Ramada Inn East & Bluegrass Convention Center, Louisville. The first General Session will be called to order at 8:50 a.m., Tuesday.

The House of Delegates

The first regular meeting of the House of Delegates will convene at 9:00 a.m., Monday, September 22, in the Julia Belle Ballroom, Convention Center. The second regular business meeting will begin at 6:00 p.m., Wednesday, September 24, in the Julia Belle Ballroom, Convention Center.

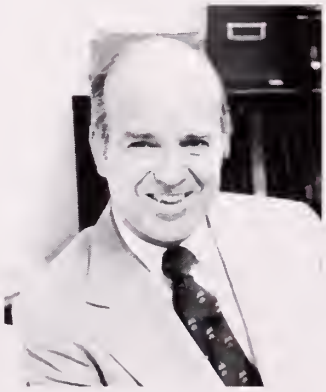
Registration

The registration desk will be open for Delegates in the General Registration Area of the Convention Center at 7:30 a.m., Monday, September 22, and at 5:00 p.m., Wednesday, September 24. General registration will be held at the registration desk in the General Registration Area of the Convention Center from 7:00 a.m. until 5:00 p.m., Tuesday and 7:30 a.m. to 3:30 p.m. on Wednesday and Thursday.

Wally O. Montgomery, M.D.
KMA President

Richard F. Hench, M.D.

Donald C. Barton, M.D.



S. Randolph Scheen, M.D.

Peter C. Campbell, Jr., M.D.

Thomas L. Heavern, M.D.

PRESIDENT-ELECT
Richard F. Hench, M.D.
Lexington

Richard F. Hench, M.D., will be installed as President of the Kentucky Medical Association at the President's Luncheon on Wednesday, September 24.

Doctor Hench is a Lexington internist and a 1956 graduate of Temple University School of Medicine, Philadelphia. He is a member of the staff of Central Baptist Hospital where he served as president of the medical staff in 1972.

Doctor Hench has served KMA as 10th District Alternate Trustee from 1974–78; 10th District Trustee from 1978–84; and Chairman of the Board from 1981–83.

He is a member of the American Board of Internal Medicine and American College of Physicians.

VICE PRESIDENT
Donald C. Barton, M.D.
Corbin

Donald C. Barton, M.D., is a family practitioner from Corbin and a 1960 graduate of the University of Louisville School of Medicine. He interned at General Hospital in Louisville and began his practice in Corbin in 1961. Doctor Barton is a Diplomate of the Board of Family Practice. He has served KMA as Delegate from 1977–79; KMA 15th District Trustee from 1978–84; AMA Alternate Delegate, 1983; Chairman of the Board 1983–84; and AMA Delegate from 1984–85. Doctor Barton is past President of the Whitley County Medical Society and served as Chairman of the KEMPAC Board from 1975–77.

VICE SPEAKER OF THE HOUSE
Thomas L. Heavern, M.D.
Highland Heights

Thomas L. Heavern, M.D., is a pediatrician with the Northern Kentucky Pediatric Group, PSC. Doctor Heavern served as KMA Parliamentarian from 1981 to 1983 and Alternate Delegate from 1972–1976. He has also served on the KMA Rules Committee of the House of Delegates, Constitution and Bylaws Committee and as regional Editor for the *Journal of the Kentucky Medical Association*. Doctor Heavern was a recipient of KMA's Distinguished Service Award in 1984.

SPEAKER OF THE HOUSE
Peter C. Campbell, Jr., M.D.
Louisville

Doctor Campbell, an ophthalmologist, is Clinical Professor of Ophthalmology at the University of Louisville School of Medicine. He is past president of the Jefferson County Medical Society and a member of the American Academy of Ophthalmology and Otolaryngology, the Kentucky Academy of Eye Physicians and Surgeons, and is past President of the medical staff at Methodist Evangelical Hospital.

SECRETARY-TREASURER
S. Randolph Scheen, M.D.
Louisville

Doctor Scheen was KMA Secretary for eight years before his election as Secretary-Treasurer in 1975. A dermatologist, he is a graduate of the University of Louisville and University of Minnesota medical schools. Doctor Scheen serves the Association as a member of the Budget Committee and Judicial Council. He is a member of the American Academy of Dermatology and the Alumni Foundation of the Mayo Clinic, and is a regular participant on local television and radio programs, answering questions from the public on dermatology.

KMA DELEGATES

Fred C. Rainey, M.D.
Elizabethtown

Doctor Rainey was elected as AMA Delegate in 1974, having previously served as President of KMA, Alternate AMA Delegate, and Board Chariman of KEMPAC. A 1955 graduate of the University of Tennessee College of Medicine, Doctor Rainey is a family physician. He is a member of the American Medical Political Action Committee, the Kentucky Academy of Family Physicians, and the American Academy of Family Physicians.

Harold D. Haller, Sr., M.D.
Louisville

Elected an AMA Delegate in 1976, Doctor Haller has been active on the Committee on Maternal and Child Health and the Committee on Health Care Costs. Doctor Haller graduated in 1963 from Bowman Gray Medical School, and has been in family practice since then. A charter member of the American Board of Family Practice, Doctor Haller also has served as President of the Kentucky Chapter of the American Academy of Family Physicians.

Donald C. Barton, M.D.
Corbin

Donald C. Barton, M.D., a family practitioner, was elected AMA Delegate in 1983. A past Chairman of the KMA Board of Trustees, Doctor Barton served as KMA Delegate from 1977-79 and AMA Alternate Delegate in 1983. He is past President of the Whitley County Medical Society; past President of the KEMPAC Board, and was 15th District KMA Trustee from 1978-84. Doctor Barton is a 1960 graduate of the University of Louisville School of Medicine.

Russell L. Travis, M.D.
Lexington

Doctor Travis is Associate Clinical Professor of Neurosurgery at the University of Kentucky School of Medicine and attending neurosurgeon at Central Baptist Hospital, Good Samaritan Hospital and Humana Hospital of Lexington. He is past President of the Kentucky Neurosurgical Society and is currently Chairman of the KMA Hotline Operating Committee. Doctor Travis has served as a member of the KMA Board of Trustees, KMA Membership Committee, and is Treasurer of the Kentucky Health Care Access Foundation. He is a 1962 graduate of the University of Louisville School of Medicine.

Journal Editors

A. Evan Overstreet, M.D.
Louisville

Doctor Overstreet had served on the Editorial Board for more than six years before becoming Editor of *The Journal* in September 1977. An internist, Doctor Overstreet is a 1955 graduate of the University of Louisville School of Medicine. He is a member of the American Society of Internal Medicine, the American College of Physicians, the Transylvania Medical Society and former President of the Louisville Society of Internists.

Paul C. Grider, Jr., M.D.
Louisville

Doctor Grider has served as Scientific Editor of *The Journal* since 1975. An internist, Doctor Grider was President of the Louisville Society of Internists from 1976 to 1977 and former President of the medical staff at Methodist Evangelical Hospital. Doctor Grider is a 1958 graduate of the University of Louisville School of Medicine.

Milton F. Miller, M.D.
Louisville

Doctor Miller is Associate Clinical Professor of Medicine at the University of Louisville School of Medicine. An internist, Doctor Miller has served as Assistant Editor of *The Journal* since 1976, has been on the membership Committee of the Jefferson County Medical Society and former President of the medical staff at Methodist Evangelical Hospital. He is a 1954 graduate of the University of Louisville.

Stephen Z. Smith, M.D.
Louisville

Doctor Smith has served as Assistant Scientific Editor for *The Journal* since 1977. A dermatologist, Doctor Smith is a 1971 graduate of Johns Hopkins University School of Medicine. He is a member of the KMA Claims and Utilization Review Committee, the American Academy of Dermatology and the American Medical Association.

David L. Stewart, M.D.
Louisville

Doctor Stewart, a former Editor of the Jefferson County Medical Society Bulletin, is in his eighth year as Assistant Editor of *The Journal*. A psychiatrist, Doctor Stewart graduated from the University of Louisville in 1946, is a member of the American Psychiatric Association, and is Chairman of the KMA Committee on Impaired Physicians.

McHenry S. Brewer, M.D.
Louisville

Doctor Brewer is serving his third year as Assistant Editor of the *Journal of the Kentucky Medical Association*. A surgeon, Doctor Brewer attended the University of Louisville School of Medicine and was President of the Jefferson County Medical Society in 1972-73. He is a fellow of the American College of Surgeons and a member of the Southern Surgical Association.

NEW TRUSTEES

Jerald M. Ford, M.D.
Ashland

Jerald M. Ford, M.D., serves as Trustee for the 13th District. An OB/GYN, Doctor Ford is a member of KOGS and is currently serving as president of the Boyd County Medical Society. He received his medical degree in 1970 from the University of Kentucky College of Medicine and is on staff at Kings Daughters Medical Center, Ashland. He is also Assistant Clinical Professor OB/GYN at the University of Kentucky College of Medicine.

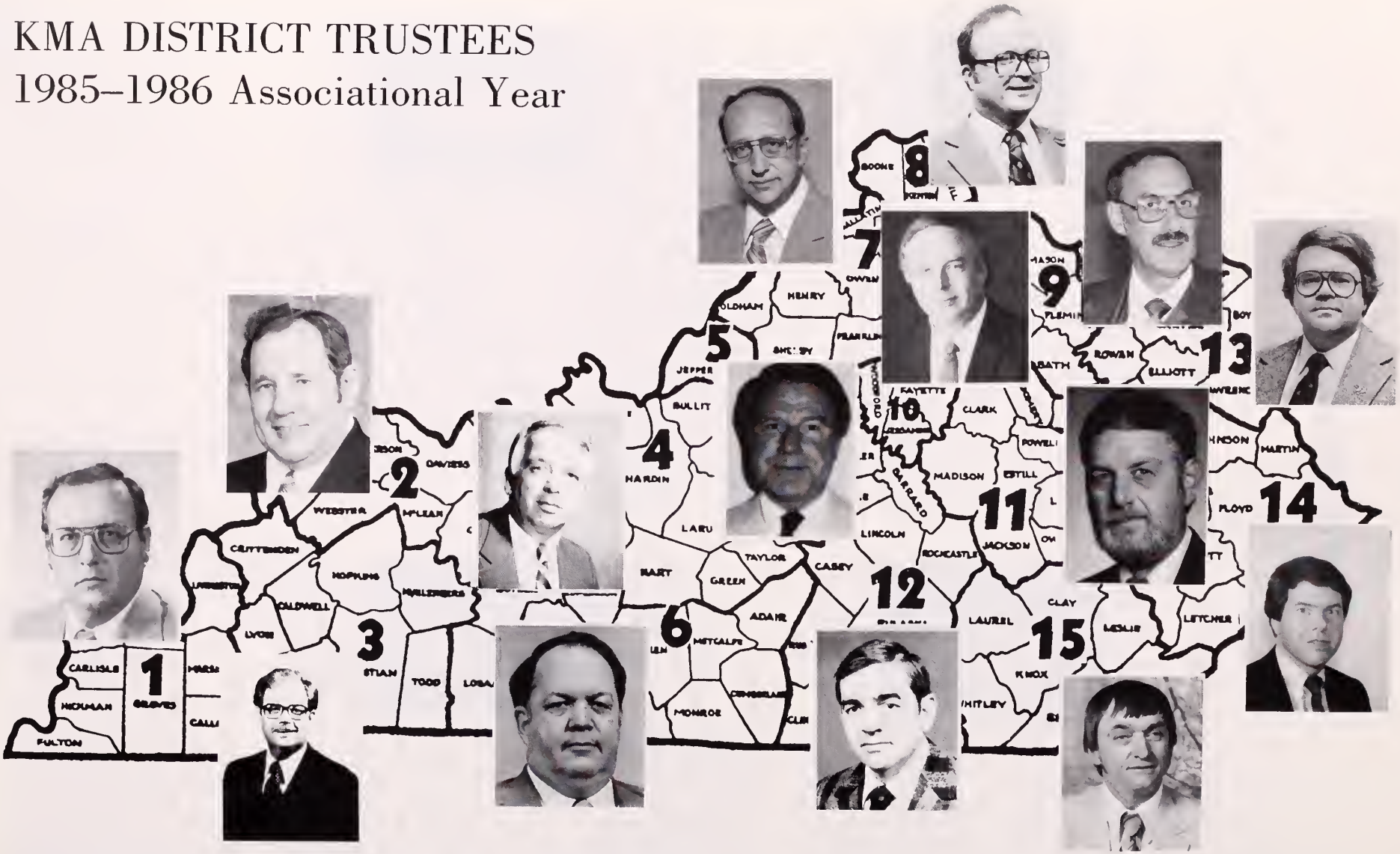
Cecil D. Martin, M.D.
Carrollton

Cecil D. Martin, M.D., is serving as Trustee from the 7th District. A family practitioner, Doctor Martin is a member of the American and Kentucky Occupational Medical Association, a Diplomat of the American Board of Family Practice and Past President of the Kentucky Occupational Medical Association. He received his medical degree in 1969 from the University of Louisville Medical School and is on staff at Carroll County Memorial Hospital, Carrollton; Kings Daughters Hospital, Madison, Indiana; and Suburban Hospital, Louisville.

Kelly G. Moss, M.D.
Maysville

Kelly G. Moss, M.D., is serving as Trustee from the 9th District. A family practitioner, Doctor Moss is a member of the AMA, Kentucky Association of Family Practice and a diplomat on the American Board of Family Practice. He received his medical degree in 1966 from the University of Louisville Medical School and is currently President of Denham Medical Clinic, Maysville.

KMA DISTRICT TRUSTEES
1985–1986 Associational Year



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William H. Klompus, M.D., Madisonville

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James G. Baker, M.D., Louisville
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Harold W. Blevins, M.D., Louisville
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Jerry B. Buchanan, M.D., Louisville
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Peter C. Campbell, Jr., M.D., Louisville
E. Dean Canan, M.D., Louisville
Alvin M. Churney, M.D., Louisville
Milton Comer, M.D., Louisville
Bob M. DeWeese, M.D., Louisville
Daniel P. Garcia, M.D., Louisville
Norman Glazer, M.D., Louisville
Lawrence G. Goldberg, M.D., Louisville
Robert R. Goodin, M.D., Louisville
S. Philip Greiver, M.D., Louisville
Cecil L. Grumbles, M.D., Louisville
John J. Guarnaschelli, M.D., Louisville
Martha Keeney Heyburn, M.D., Louisville
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Morton L. Kasdan, M.D., Louisville
Lowell D. Katz, M.D., Louisville
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WAYNE

WEBSTER

WHITLEY
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Carmel Wallace, M.D., Corbin

WOLFE
Paul F. Maddox, M.D., Campton

WOODFORD
C. Dale Goodin, M.D., Versailles

KMA RESIDENT PHYSICIANS SECTION
Anne W. Winterland, M.D., Louisville

KMA HOSPITAL MEDICAL STAFF SECTION
Stuart G. Yeoman, M.D., Bowling Green

KMA MEDICAL STUDENT SECTION

Reference Committee Activity

Speaker Peter C. Campbell, Jr., M.D., Louisville, will assign all officers' and committees' reports and Resolutions to one of six Reference Committees at the first meeting of the KMA House of Delegates at 9 a.m., Monday, September 22. A brief session for Reference Committee Chairmen will be held at 12:30 p.m., Monday, in Meeting Room A of the convention center. Any KMA member wishing to testify on any Resolution or report is urged to be present for the Reference Committee meetings which will be held at 2 p.m., Monday, September 22, in the meeting rooms of the convention center. These open sessions will last at least one hour in order for all who wish to speak to be heard. Following the open hearings, the Committees will go into executive sessions to study the reports, review the testimony and write their reports to the House.

The Committees' recommendations will be presented at the final meeting of the House, Wednesday evening, September 24, in the Julia Belle Ballroom, of the convention center.

As Speaker of the House of Delegates, Doctor Campbell is in the process of finalizing appointments to the six Reference Committees, Credentials Committee and Tellers Committee.

If your society has not yet submitted the name of your Delegate(s) to the Headquarters Office, you should do so immediately, as only those names recorded in the office can be considered for appointment to one of these important committees.

A complete listing of members who will be serving on the six Reference Committees and the location of the Reference Committee meetings will be published in the September issue of the KMA *Journal*.

Anyone desiring names of Reference Committee members before the September issue is published should contact the Headquarters Office.

Nominating Committee to Meet Monday, September 22

The KMA Nominating Committee will hold an open meeting at the close of the first meeting of the House of Delegates, Monday, September 22, in the Julia Belle Ballroom, Convention Center. Any KMA member may confer with the Committee during this meeting.

The report of the Nominating Committee will be posted in the general assembly hall at the conclusion of the first general session, Tuesday morning, September 23.

Nominations may be made from the floor during the second meeting of the House of Delegates, Wednesday evening, September 24 in the Julia Belle Ballroom, Convention Center. The House will vote on the nominees at the close of this meeting.

Members of the Committee are: Paul J. Sides, M.D., Lancaster, Chairman; James S. Brashear, M.D., Central City; William D. Pratt, M.D., London; Mary L. Wiss, M.D., Pikeville; Stuart G. Yeoman, M.D., Bowling Green.

Nominations should be sent before the Annual Meeting to the KMA Headquarters Office, Attention, Nominating Committee.

House to Elect New Officers During Annual Meeting

KMA officers for the 1986-87 Association year will be elected by the House of Delegates at the close of its final meeting, Wednesday evening, September 24. Officers to be elected from the state-at-large are:

Office	Term
President-Elect	One Year
Vice President	One Year
Delegates to the AMA	Two Years
*Harold D. Haller, M.D., Louisville	
*Russell L. Travis, M.D., Lexington	
Alternate Delegates to the AMA	Two Years
*Kenneth P. Crawford, M.D., Louisville	
*Carl Cooper, Jr., M.D., Bedford	
Speaker, House of Delegates	Three Years
*Peter C. Campbell, Jr., M.D., Louisville	
Vice Speaker, House of Delegates	Three Years
*Thomas L. Heavern, M.D., Highland Heights	

*Incumbent

Election of Trustees and Alternate Trustees

The House of Delegates will elect five District Trustees and five Alternate Trustees at its second regular meeting, Wednesday, September 24. Nominations will be made by the Delegates from the electing Districts at a meeting following the first meeting of the House on Monday, September 22.

The Nominating Committee will report at the close of the first scientific session on Tuesday, September 23. Further nominations may be made from the floor at the final meeting of the House on Wednesday evening, September 24. All nominations are considered and acted upon by the Delegates at this final meeting.

Districts electing Trustees for three-year terms are: FIRST DISTRICT (incumbent, John D. Noonan, M.D., Paducah); THIRD DISTRICT; FOURTH DISTRICT; TWELFTH DISTRICT; and the FOURTEENTH DISTRICT (incumbent, Ronald D. Hall, M.D., Pikeville).

Districts electing Alternate Trustees are the same as those electing Trustees. Incumbents are: James S. Gwinn, M.D., Paducah, 1st District; N.H. Talley, M.D., Princeton, 3rd District; Wreno M. Hall, M.D., Elizabethtown, 4th District; and James R. Pigg, M.D., Pikeville, 14th District.

Trustees in the 1st and 14th Districts are eligible for re-election, while the Trustees in the 3rd, 4th and 12th Districts have served two full, consecutive terms and are not eligible for re-election.

Alternate Trustees in the 1st, 3rd, 4th and 14th Districts are eligible for re-election, while the Alternate Trustee for the 12th District has served two full, consecutive terms and is not eligible for re-election.

Annual Meeting Special Features

"The Aging Patient"

SCIENTIFIC SESSIONS are scheduled for September 23, 24 and 25, at the Ramada Inn East Convention Center in Louisville. The theme for the 1986 scientific session is "The Aging Patient." Both the presentations and discussion periods will contribute to the continuing medical education of Kentucky's physicians.

TWENTY-TWO SPECIALTY GROUPS will hold meetings on the afternoons of September 23, 24 and 25. Beginning at 2 p.m., they will be held in the meeting rooms of the Ramada Inn East and Convention Center. Individual programs of specialty societies are listed in this issue. All general sessions will be held in the mornings. Specialty groups will meet all three afternoons with no general sessions scheduled during these specialty group meetings. All KMA members are invited to attend any specialty meetings.

SCIENTIFIC AND TECHNICAL EXHIBITS will display new medical products, services and techniques in the General Sessions area of the Convention Center during the 1986 Annual Meeting. Members and guests are urged to take the opportunity to view products of interest at the 30-minute intermissions scheduled during each general and specialty session.

THE KMA HOUSE OF DELEGATES will meet twice during the Annual Meeting. The first meeting of the House will be held at 9 a.m., Monday, September 22, in the Julia Belle Ballroom, Convention Center. The final meeting will be held Wednesday, September 24, at 6 p.m., in the Julia Belle Ballroom, Convention Center. Officers for the 1986-87 Associational year will be elected at the second meeting.

THE PRESIDENT'S LUNCHEON will be held on Wednesday, September 24, in the Julia Belle Ballroom, Ramada Inn East Convention Center. This year's guest speaker during the President's Luncheon is John J. Coury, Jr., M.D., AMA President. The luncheon will include the presentation of KMA awards and the installation of the 1986-87 President, Richard F. Hench, M.D., Lexington.

1986 Annual Meeting to Honor Past President Charles Z. Aud, M.D.

CHARLES Z. AUD
1906

The 1986 Annual Meeting of the Kentucky Medical Association will be officially titled, "The Charles Z. Aud Meeting" in remembrance of the 1906 President of the Association.

The tradition of honoring a past president of KMA and other distinguished physicians originated at the 1935 Annual Meeting.

Eugene H. Conner, M.D., Louisville, KMA Historian, has written a biography on Doctor Aud for the Annual Meeting Program booklet to be distributed during the meeting in Louisville, September 23-25.

You Are Invited

to attend the

24th Annual

KEMPAC Political Seminar

September 22, 1986
Julia Belle Room
Ramada Inn — Bluegrass Convention Center
Louisville, Kentucky

Reception 6:00 p.m. EDT
Banquet & Program 7:00 p.m. EDT

— Featuring —

James H. Sammons, M.D., Executive Vice President AMA
Thomas R. Berglund, M.D., Chairman of AMPAC
PROFESSIONAL LIABILITY

YOUR KEMPAC BOARD OF DIRECTORS

Chairman — Harold L. Bushey, M.D.
Vice Chairman — John D. Noonan, M.D.
Treasurer — Walter H. Zukof, M.D.
Assistant Treasurer — M. A. Douglass, Jr., M.D.
Secretary — Francis Halcomb, M.D.

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John D. Noonan, M.D. – 2018 Broadway, Paducah, KY 42001
Danny Hatfield, M.D. – Trover Clinic, Madisonville, KY 42431

SECOND CONGRESSIONAL DISTRICT
M.A. Douglass, Jr., M.D. – Magnolia, KY 42757
Francis Halcomb, M.D. – 217 W. Main St., Scottsville, KY 42164

THIRD CONGRESSIONAL DISTRICT
K. Thomas Reichard, M.D. – Suite 7A Suburban Medical Plaza, Louisville, KY 40207
Walter H. Zukof, M.D. – 7512 Old Shepherdsville Road, Louisville, KY 40219

FOURTH CONGRESSIONAL DISTRICT
Charles F. Allnutt, M.D. – 2600 Shaker Road, Lakeside Park, KY 41017
John S. Spratt, M.D. – 529 S. Jackson, Louisville, KY 40202

FIFTH CONGRESSIONAL DISTRICT
Harold L. Bushey, M.D. – 406 Knox Street, Barbourville, KY 40906
Carmel Wallace, Jr., M.D. – 373 Bold Ruler Trail, Corbin, KY 40701

SIXTH CONGRESSIONAL DISTRICT
David B. Stevens, M.D. – 1900 Richmond Road, Lexington, KY 40502
John R. Allen, M.D. – 135 E. Maxwell, #104, Lexington, KY 40508

SEVENTH CONGRESSIONAL DISTRICT
Samuel J. King, M.D. – P.O. Box 3207, Pikeville, KY 41501
Paul E. Lett, M.D. – 4551 Brenda Drive, Ashland, KY 41101

REPRESENT AUXILIARY to KMA
Barbara Davis – 1604 Sylvan Way, Louisville, KY 40205
Gerry Montgomery – 3690 Marlborough Way, Paducah, KY 42001
Sara Gail Travis – 744 Cottage Grove Lane, Lexington, KY 40502

Tickets must be purchased in advance and are available from a KEMPAC Director or through the KEMPAC Headquarters Office. If you wish to order by mail, please complete the coupon below and mail with your check payable to KEMPAC to: KEMPAC – 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

Please send me _____tickets at $25.00 each (8 places at a table).

Enclosed is my check for $_____.

NAME _____ Address _____

(Please print or type)

1986 Annual Meeting Program Summary

Kentucky Medical Association

September 20-25

Ramada Inn East/Bluegrass Convention Center - Louisville

SATURDAY, SEPTEMBER 20

12:00 noon	KMA Hospital Medical Staff Section Meeting	Meeting Room G - BCC
6:00 p.m.	KMA Executive Committee Dinner & Meeting	Meeting Room F - BCC

SUNDAY, SEPTEMBER 21

9:00 a.m.	KMA Board of Trustees Meeting & Lunch	Meeting Room F - BCC
2:00 p.m.	Open Session on Professional Liability Insurance	BCC
6:30 p.m.	McDowell/Crawford Ball	Embassy Ballroom - Hilton East

MONDAY, SEPTEMBER 22

7:30 a.m.	Registration	Registration Area - BCC
9:00 a.m.	First Meeting, KMA House of Delegates	Julia Belle Ballroom - BCC
12:30 p.m.	Luncheon, Reference Committee Chairmen	Meeting Room A - BCC
11:00 p.m.	Auxiliary Committee Meetings	Kentucky A - Ramada Inn
2:00 p.m.	Reference Committee Meetings	Various Meeting Rooms - BCC
6:00 p.m.	KEMPAC Reception & Dinner	Reception - Mtg. Rms. B-C-D-E - BCC Dinner - Julia Belle Ballroom - BCC

TUESDAY, SEPTEMBER 23

7:00 a.m.	KEMPAC Board Breakfast Meeting	Board Room - Ramada
7:00 a.m.	Maternal Mortality Committee Breakfast & Meeting	Meeting Room H - BCC
7:00 a.m.	Registration	Registration Area - BCC
8:50 a.m.	Opening Ceremonies	General Sessions Area - BCC
9:00 a.m.	First Scientific Session	General Sessions Area - BCC
12:00 noon	Luncheon Meeting, Executive Committee & Reference Comm. Chm	Meeting Room J - BCC
2:00 p.m.	Specialty Group Sessions . . . Various Meeting Rooms - BCC (Seven Specialty Groups will meet simultaneously at this time. Their programs begin on page 429)	

WEDNESDAY, SEPTEMBER 24

7:30 a.m.	Registration	Registration - BCC
8:50 a.m.	Second Scientific Session	General Sessions Area - BCC
11:50 a.m.	President's Luncheon	Julia Belle Ballroom - BCC
2:15 p.m.	Specialty Group Sessions . . . Various Meeting Rooms - BCC (Six Specialty Groups will meet simultaneously at this time. Their programs begin on page 432)	
3:00 p.m.	KMA Board of Trustees Meeting & Dinner	Meeting Room F - BCC
6:00 p.m.	Second Meeting, KMA House of Delegates	Julia Belle Ballroom - BCC

THURSDAY, SEPTEMBER 25

8:50 a.m.	Third Scientific Session	General Sessions Area - BCC
12:00 noon	KMA Board of Trustees Luncheon Meeting	Meeting Room G - BCC
2:00 p.m.	Specialty Group Sessions . . . Various Meeting Rooms - BCC (Nine Specialty Groups will meet simultaneously at this time. Their programs begin on page 434)	

A 30-minute intermission has been scheduled during each morning Scientific Session and each afternoon Specialty Group Session for visiting Scientific and Technical Exhibits

The Kentucky Medical Association SCIENTIFIC PROGRAM Charles Z. Aud Meeting Ramada Inn East Convention Center, Louisville

DONALD A. RIOPEL, M.D.
Charlotte, North Carolina

Director, Division of Pediatric Cardiology, The Sanger Clinic, P.A., Charlotte, North Carolina, and Clinical Professor of Pediatrics, University of North Carolina, Chapel Hill. M.D., 1963, University of Florida. Fellow, American Academy of Pediatrics and American College of Cardiology. Member, American Heart Association; AMA; South Carolina Medical Association; Board of Directors, South Carolina Heart Association. Author of numerous publications.

"THE AGING PATIENT"

Tuesday, September 23, 1986
Morning General Session
General Sessions Area - Bluegrass Convention Center
Wally O. Montgomery, M.D.
KMA President
Presiding

8:15 a.m.	Movie — "Osteoporosis of Aging"
8:50 a.m.	Opening Ceremonies
9:00 a.m.	**"Identification of the High Risk Surgical Patient"** Louis R.M. Del Guercio, M.D., Val Halla, NY
9:20 a.m.	**"Atherosclerotic Risk Factors in the Child and Adolescent"** Don Riopel, M.D., Charlotte, NC
9:40 a.m.	**"Diagnosis and Treatment of Prostatic Carcinoma in the Aging Male"** David F. Paulson, M.D., Durham, NC
10:00 a.m.	**Intermission to Visit Exhibits**
10:30 a.m.	**"The Patient With TIA's"** Robert A. Ratcheson, M.D., Cleveland, OH
10:50 a.m.	**"Hypertension in the Elderly"** Marcus C. Houston, M.D., Nashville, TN
11:10 a.m.	**"Osteoporosis: How You Ought to Handle Hormone Replacement Therapy"** Celso-Ramon Garcia, M.D., Philadelphia, PA
11:30 a.m.	**"The Interface of Mental and Physical Health Phenomena in Geriatrics"** Gene Cohen, M.D., Rockville, MD

Ky Chapter, American Academy of Pediatrics
Meeting Room G — Bluegrass Convention Center
Tuesday, September 23, 1986

2:00 p.m. **"Chest Pain in Children"**
Gregory Johnson, M.D., Lexington, KY
2:30 p.m. **"Blood Pressure and Hypertension in Children and Adolescents"**
Donald Riopel, M.D., Charlotte, NC
3:00 p.m. **Intermission to Visit Exhibits**
3:30 p.m. **"Lipid Abnormalities in Children"**
Allan Rees, M.D., Louisville, KY
4:00 p.m. Roundtable Discussion
Gregory Johnson, M.D., Lexington, KY; Donald Riopel, M.D., Charlotte, NC; and Allan Rees, M.D., Louisville, KY

Ky Psychiatric Association
Meeting Room F — Bluegrass Convention Center
Tuesday, September 23, 1986

2:00 p.m. Workshop — "Current Issues & Geriatric Psychiatry"
Gene Cohen, M.D., Rockville, MD

Ky Urological Association
Meeting Rooms B & C — Bluegrass Convention Center
Tuesday, September 23, 1986

2:00 p.m. **"The Role of Surgery in the Management of Genito-Urinary Malignancies"**
David F. Paulson, M.D., Durham, NC
3:00 p.m. Pyelogram Hour
4:00 p.m. Business Meeting

Ky OB/GYN Society - Ky Section ACOG
Julia Belle Ballroom — Bluegrass Convention Center
Tuesday, September 23, 1986

2:00 p.m. **"Oophorectomy in Women Undergoing Abdominal Hysterectomy For Benign Disease"**
Celso-Ramon Garcia, M.D., Philadelphia, PA
2:30 p.m. Discussion led by moderator, Emery Wilson, M.D., Lexington, KY
3:00 p.m. Adjournment to Visit Exhibits

DAVID F. PAULSON, M.D.
Durham, North Carolina

Director of Urologic Research Laboratories, Duke University Medical Center and Veterans Administration Hospital, Durham. Chief of Urologic Surgery, Consultant in Urologic Surgery, Duke University Medical Center. M.D., 1964, Duke School of Medicine. Member, American Association for the Advancement of Science; American Association of Clinical Urologists; American College of Surgeons; AMA; Association of Academic Surgery; North Carolina Medical Society; Royal Society of Medicine. National Chairman, Uro-Oncology Research Group; Associate Editor, *Urological Research, Investigative Urology, World Journal of Urology* and *Archives of Andrology*.

ROBERT A. RATCHESON, M.D.
Cleveland, Ohio

Harvey Huntington Brown, Jr., Professor of Neurological Surgery; Director, Division of Neurological Surgery, Case Western Reserve University School of Medicine. M.D., 1965, Northwestern University Medical School, Chicago, Illinois. Member, Publications Committee, Congress of Neurological Surgeons; American College of Surgeons; Neurosurgical Society of America; Ohio State Medical Association; AMA; and Society for Neuroscience.

MARCUS C. HOUSTON, M.D.
Nashville, Tennessee

Assistant Professor of Medicine, Medical Director, Cooperative Care Center, and Co-Director Medical Intensive Care Unit, Vanderbilt University Medical School, Nashville, Tennessee. M.D., 1974, Vanderbilt University Medical School. Editorial Consultant, *Chest, Archives of Internal Medicine, American Medical Reports*, and *American Heart Journal*. Member, American Heart Association; Tennessee Medical Association; American Society of Internal Medicine; AMA; Society of Critical Care Medicine. Author of numerous publications.

CELSO-RAMONE GARCIA, M.D.
Philadelphia, Pennsylvania

Professor of Obstetrics/Gynecology and the William Shippen, Jr. Professor and Director, Division of Human Reproduction, Department of Obstetrics and Gynecology, University of Pennsylvania School of Medicine. M.D., 1945, State University of New York, Downstate Medical Center. Member, Society of Reproductive Surgeons, Past President 1982–83; International Society for Research and Reproduction; American Association of Planned Parenthood Physicians; American Fertility Society; AMA; National Medical Advisory Committee of Planned Parenthood-World Population; National Institute of Child Health and Human Development; National Institute of Health.

Ky Neurosurgical Society
Meeting Room A — Bluegrass Convention Center
Tuesday, September 23, 1986

2:00 p.m. **"Management of the Occluded Carotid Artery"**
Robert Ratcheson, M.D., Cleveland, OH

2:30 p.m. **"Intra-operative Ultra-sound for CNS Tumors"**
John Guarnaschelli, M.D., F.A.C.S., Louisville, KY

2:50 p.m. **"Tethered Cord Syndrome"**
Elaine Joy Arpin, M.D., F.R.C.S., (C), Louisville, KY

3:10 p.m. **Intermission to Visit Exhibits**

3:40 p.m. **"Anterior vs. Posterior Spinal Fusions"**
(Results of 100 Consecutive Patients)
Christopher Shields, M.D.; John R. Johnson, M.D.; and Richard T. Holt, M.D., Louisville, KY

4:00 p.m. **"Modern Concepts in Cerebral Resuscitation"**
Harvey L. Edmonds, Jr., Ph.D., Louisville, KY

4:20 p.m. **"Stroke Research and MRI"**
Robert P. Dempsey, M.D., Lexington

4:40 p.m. **"Asymptomatic Post-traumatic Syrinx in Spinal Cord Injury Patients: an MRI Screening Study"**
Phillip A. Tibbs, M.D., Lexington, KY

5:00 p.m. **"Recent Advances and Breakthroughs - Craniosynostosis"**
John Walsh, M.D., Lexington, KY

5:20 p.m. **"Brain Metastasis"**
Roy Patchell, M.D., Lexington, KY

Ky Chapter, American College of Chest Physicians
Meeting Room I — Bluegrass Convention Center
Tuesday, September 23, 1986

1:45 p.m. **"Hypertension in the Elderly"**
Marcus C. Houston, M.D., Nashville, TN

2:30 p.m. **"Septic Shock"**
Michael Gelfand, M.D., Memphis, TN

3:00 p.m. **Intermission to Visit Exhibits**

3:30 Roundtable discussions running
5:00 p.m. simultaneously

"Nosocomial Pneumonias"
Michael Gelfand, M.D., Memphis, TN

"Angioplasty Current Status"
Ronald R. Masden, M.D., Louisville, KY

"Puzzling X-rays of the Chest"
Stanley R. Rehm, M.D., Lexington, KY
(Bring your problems)

"Digitalis - Use and Abuse"
Morris M. Weiss, M.D., Louisville, KY

"Arrhythmia Recognition"
Armond T. Gordon, M.D., Louisville, KY
(Bring your problems)

Ky Chapter, American College of Surgeons
General Sessions Area — Bluegrass Convention Center
Tuesday, September 23, 1986

2:00 p.m. Program will cover Surgery in the Aged; Pre- and Post-Operative Ethics; Critical Care with Cost and Ethics Emphasized for all Surgeons.
Speakers and topics To Be Announced.

Wednesday, September 24, 1986
Morning General Session
General Sessions Area - Bluegrass Convention Center
Max A. Crocker, M.D.
Chairman, Scientific Program Committee
Presiding

8:15 a.m. Movie — "Learning to Enjoy"
8:50 a.m. Opening Ceremonies
9:00 a.m. **"The Aging Patient: The Benefits and Assistance of Plastic Surgery"**
John C. Kelleher, M.D., Toledo, OH
9:20 a.m. **"Care of the Elderly in a Changing Economy"**
Jon C. Calvert, M.D., Tulsa, OK
9:40 a.m. **"Childhood Hip Disease - Late Effects in the Adult"**
Anthony J. Bianco, Jr., M.D., Rochester, MN
10:00 a.m. **Intermission to Visit Exhibits**
10:30 a.m. **"Pathology of the Aging Heart: What are the Questions?"**
Grover M. Hutchins, M.D., Baltimore, MD
10:50 a.m. **"Abuse and Neglect of the Elderly"**
David Ross, M.D., Cincinnati, OH
11:10 a.m. **"What Aging Processes are Reliable and Valid Indications for Retirement?"**
Robert H. Jones, M.D., Rochester, NY
11:30 a.m. **"Breast Cancer: Contrasted in Young and Aging Women"**
Robert Egan, M.D., Atlanta, GA
11:50 a.m. **President's Luncheon**

PRESIDENT'S LUNCHEON
Julia Belle Ballroom
Ramada Inn East
Wally O. Montgomery, M.D., Paducah
KMA President, Presiding
Invocation
Recognition
Awards Presentation
S. Randolph Scheen, M.D., Louisville
Chairman, KMA Awards Committee
Installation of the New KMA President

GENE D. COHEN, M.D., Ph.D.
Rockville, Maryland

Director, Program on Aging, National Institute of Mental Health, Rockville, Maryland; Clinical Professor, Department of Psychiatry, Georgetown University, Washington, D.C., and Consultant, Council on Aging, American Psychiatric Association. M.D., 1970, Georgetown University School of Medicine. Contributing Editor, *Journal of Hospital and Community Psychiatry*. Fellow, Gerontological Society of America and American Psychiatric Association. Member, American Geriatrics Society, Group for the Advancement of Psychiatry and American Association of Geriatric Psychiatry.

JOHN C. KELLEHER, M.D.
Toledo, Ohio

Plastic Surgeon, Northwest Ohio Plastic Surgeons, Inc., Toledo. Clinical Professor, Department of Surgery, Division of Plastic Surgery, Medical College of Ohio. M.D., 1944, Jefferson Medical College, Philadelphia, Pennsylvania. Member, Board of Directors, Ohio Medical Political Action Committee; Abstract Committee for *Journal of Plastic and Reconstructive Surgery*; AMA; American Society for Surgery of the Hand; American Burn Association, and President of American Association of Plastic Surgeons.

JON C. CALVERT, M.D.
Tulsa, Oklahoma

Associate Dean of Clinical Sciences, Oral Roberts School of Medicine; Chairman and Professor, Department of Family Medicine, Oklahoma University School of Medicine. M.D., 1968, Baylor University College of Medicine, Houston, Texas. Member, American Academy of Family Physicians; American Association for the Advancement of Science; AMA; Southern Society of Anatomist; American Geriatrics Society; and Association of American Medical Colleges.

A. J. BIANCO, JR., M.D.
Rochester, Minnesota

Professor of Orthopedics, Mayo Medical School, Rochester. M.D., 1948, University of Minnesota, Minneapolis. Member, American Academy of Orthopedic Surgery; American Academy of Pediatrics; Scoliosis Research Society; AMA; Pediatric Orthopedic Society, President 1982; Minnesota State Medical Association

Ky Society of Pathologists
Meeting Room I — Bluegrass Convention Center
Wednesday, September 24, 1986

2:00 p.m. **"Ischemic Heart Disease in the Elderly"**
Grover M. Hutchins, M.D., Baltimore, MD

3:00 p.m. **Intermission to Visit Exhibits**

3:30 p.m. **"Valvular Heart Disease in the Elderly"**
Grover M. Hutchins, M.D., Baltimore, MD

4:30 p.m. Business Meeting

Ky Chapter, American College of Emergency Physicians
Meeting Room A — Bluegrass Convention Center
Wednesday, September 24, 1986

2:00 p.m. **"Abuse in the Elderly"**
David Ross, M.D., Cincinnati, OH

3:00 p.m. **Intermission to Visit Exhibits**

3:30 p.m. **"Thermo-Regulation in the Elderly"**
Daniel Danzl, M.D., Louisville, KY

Ky Occupational Medical Association
Meeting Room H — Bluegrass Convention Center
Wednesday, September 24, 1986

2:00 p.m. **"To Compare and Contrast Cumulative Trauma Disorders and Degenerative Disc Disease (Low Back Pain)"**
Robert H. Jones, M.D., Rochester, NY

3:00 p.m. **Intermission to Visit Exhibits**

3:30 p.m. **"Hydrofluoric Acid"**
Benjamin Ramirez, M.D., Louisville, KY

4:00 p.m. **"The Frequent Medical Department Visitor"**
Gilbert Woodall, Jr., M.D., Bowling Green, KY

4:30 p.m. **"Assessing Exposure Claims: Dioxin Case Example"**
Carlo H. Tamburro, M.P.H., Louisville, KY

Ky Society for Plastic & Reconstructive Surgery
Meeting Rooms B & C — Bluegrass Convention Center
Wednesday, September 24, 1986

2:15 p.m. **"Welcome"**
Martin J. Luftman, M.D., Lexington, KY
2:20 p.m. **"Head & Neck Cancer in the Aged Patient"**
Edward A. Luce, M.D., Lexington, KY
2:30 p.m. **"Split Thickness Plantar Skin Grafting for Reconstruction of Plantar Defects"**
Joseph C. Banis, M.D., Louisville, KY
2:40 p.m. **To Be Announced**
*Randy Buckspan, M.D., Lexington, KY
2:50 p.m. **To Be Announced**
*Clem Cotter, M.D., Louisville, KY
3:00 p.m. Discussion
3:15 p.m. **"Abdominal Pedical Flaps Revisited"**
John C. Kelleher, M.D., Toledo, OH
4:00 p.m. **"Emergency Free Flaps in the Upper Extremity"**
Graham Lister, M.D., Louisville, KY, and Marc Bissonnette, M.D., Louisville, KY
4:10 p.m. **To Be Announced**
*David Durst, M.D., Lexington, KY
4:20 p.m. **To Be Announced**
*Jim Payne, M.D., Louisville, KY
4:30 p.m. Discussion
4:50 p.m. **"Suction Lipolysis in the Face"**
William L. Dowden, M.D., Lexington, KY
5:00 p.m. **"Silicone '86 - Evolution or Revolution"**
Bruce Reuter, Dow Corning
5:10 p.m. **"The Versatility of V-Y Flaps in the Face"**
Martin J. Luftman, M.D., Lexington, KY

5:20 p.m. Discussion
5:30 p.m. Vote on Resident's Competition Papers
6:00 p.m. Adjourn to Cocktail Party hosted by Dow Corning - Bluegrass Convention Center

*Papers for Resident's Competition

Ky Chapter, American Academy of Family Physicians
Meeting Room J — Bluegrass Convention Center
Wednesday, September 24, 1986

2:15 p.m. **Program To Be Announced**

Ky Orthopedic Society
KMA General Sessions Area — Bluegrass Convention Center
Wednesday, September 24, 1986

2:15 p.m. **Program To Be Announced**

GROVER M. HUTCHINS, M.D.
Baltimore, Maryland

Professor of Pathology, The Johns Hopkins University School of Medicine, Baltimore, Maryland; Director, Autopsy Pathology, The Johns Hopkins Hospital. M.D., 1961, The Johns Hopkins University School of Medicine. Member, Editorial Board, *American Journal of Cardiovascular Pathology*; American Association of Pathologists; American Heart Association; College of American Pathologists; Society for Cardiovascular Pathology; and International Academy of Pathology. Author of numerous articles.

DAVID S. ROSS, M.D.
Cincinnati, Ohio

Attending Physician, Center for Emergency Care, University of Cincinnati Hospital; Medical Director, Emergency Department, William Booth Memorial Hospital, Florence, Kentucky; Assistant Professor, Department of Emergency Medicine, University of Cincinnati Medical Center. M.D., 1972, University of Florida College of Medicine, Gainesville, Florida. Member, KMA, University Association for Emergency Medicine; International Society on Disaster Medicine; Society of Teachers of Emergency Medicine.

ROBERT H. JONES, M.D.
Rochester, New York

Corporate Rehabilitation Consultant, Eastman Kodak Company, and Medical Consultant to Human Factors Group, Health, Safety and Human Factors Laboratory. M.D., 1954, Harvard Medical School, Cambridge, Massachusetts. Member, American Congress of Rehabilitation Medicine; Board of Directors, Rochester Rehabilitation Center; Survey Consultant to the Commission on Accreditation of Rehabilitation Facilities.

ROBERT L. EGAN, M.D.
Atlanta, Georgia

Professor of Radiology and Chief, Mammography Section, Department of Radiology, Emory University, Atlanta, Georgia. M.D., 1950, University of Pittsburg School of Medicine, Pittsburg, Pennsylvania. Member, Board of Directors of American Cancer Society, Georgia Division; American Academy of General Practice; AMA; Public Health Cancer Association of America; American College of Radiology; The Royal Society of Health; Editorial Board, *American Journal of Roentgenology, Breast.*

Thursday, September 25, 1986
Morning General Session
General Sessions Area - Bluegrass Convention Center
Donald C. Barton, M.D.
KMA Vice President
Presiding

8:15 a.m.	Movie — "Behavioral Manifestations in the Aging Patient"
8:50 a.m.	Opening Ceremonies
9:00 a.m.	**"Do Childhood Asthma and Other Chronic Lung Diseases Relate to Chronic Lung Diseases in the Elderly?"** Roger M. Katz, M.D., Los Angeles, CA
9:20 a.m.	**"Diagnosing the Cause of Hearing Loss"** William L. Meyerhoff, M.D., Dallas, TX
9:40 a.m.	**"Death in Peace or in Pieces?"** C. R. Stephen, M.D., Creve Coeur, MO
10:00 a.m.	**Intermission to Visit Exhibits**
10:30 a.m.	**"The Physiology of Aging"** William B. Applegate, M.D., Memphis, TN
10:50 a.m.	**"Structural and Functional Changes of Normal Aging Skin"** Neil A. Fenske, M.D., Tampa, FL
11:10 a.m.	**"Drug Induced ("Pill") Esophagitis: The Scourge of the Elderly"** H. Worth Boyce, M.D., Tampa, FL
11:30 a.m.	**"Treatable Causes of Visual Loss in the Elderly"** Henry Clayman, M.D., North Miami Beach, FL
11:50 a.m.	**"Tuberculosis in the Elderly and What to do About It"** William Stead, M.D., Little Rock, AR

Ky Society of Otolaryngology
Head & Neck Surgery, Inc.
Meeting Room H — Bluegrass Convention Center
Thursday, September 25, 1986

2:00 p.m.	**"Meniere's Disease"** William L. Meyerhoff, M.D., Ph.D., Dallas, TX
2:45 p.m.	Questions and Answers
3:00 p.m.	**Intermission to Visit Exhibits**
3:15 p.m.	**"Sudden Sensorineural Hearing Loss"** William L. Meyerhoff, M.D., Ph.D. Dallas, TX
3:45 p.m.	Questions and Answers
4:00 p.m.	**"Assistive Listening Devices & Systems - ALDS"** Gwenyth R. Vaughan, Ph.D., and Robert K. Lightfoot, M.S., Birmingham, AL
4:55 p.m.	Questions and Answers
5:00 p.m.	Hands on Demonstration of the Working of the ALDS

Ky Society of Allergy & Clinical Immunology
Meeting Rooms B & C — Bluegrass Convention Center
Thursday, September 25, 1986

2:00 p.m. **"Improving the Care of the Allergic Population"**
Roger M. Katz, M.D., Los Angeles, CA
2:30 p.m. **"Severe Allergic Reactions to Beer"**
Lakhman Gondalia, M.D., Louisville, KY
3:00 p.m. **Intermission to Visit Exhibits**
3:30 p.m. **"Severe Anaphylaxis in Patients Receiving Beta Blocker Therapy"**
Hobert L. Pence, M.D., Louisville, KY
4:00 p.m. Business Meeting

Ky Region, American College of Physicians
Meeting Rooms D & E — Bluegrass Convention Center
Thursday, September 25, 1986

2:00 p.m. **"Approach to the Elderly Confused Patient"**
William B. Applegate, M.D., Memphis, TN
2:30 p.m. **"The Geriatric Acute Care Unit in a Community Hospital — The Jewish Hospital Experience"**
S. Phillip Greiver, M.D., Louisville, KY
3:00 p.m. **Intermission to Visit Exhibits**
3:30 p.m. **"Diabetes in the Elderly"**
C. Russell Hoffman, Jr., M.D., Louisville, KY
4:00 p.m. **"Hypertension in the Elderly"**
Kevin L. Curran, M.D., Louisville, KY
4:30 p.m. **"Sleep Disturbance in the Elderly"**
David H. Winslow, M.D., Louisville, KY

Ky Dermatological Society
Methodist Hospital - Louisville, KY
Thursday, September 25, 1986

2:00 p.m. Case Presentations
310 East Broadway — Department of Dermatology
3:00 p.m. Coffee Break
3:30 p.m. Case Discussions
Methodist Hospital Auditorium

ROGER M. KATZ, M.D.
Los Angeles, California

Clinical Professor, Department of Pediatrics, UCLA School of Medicine, Los Angeles; Co-Director, Allergy/Immunology Clinics, Cedars-Sinai Medical Center, Los Angeles. M.D., 1965, University of Louisville School of Medicine. Member, Los Angeles Pediatric Society; California Medical Association; American College of Allergists, Fellow; Western Society for Pediatric Membership; American College of Sports Medicine. Consultant, *Allergy News*. Medical Director, Asthma Summer Camp; Asthma and Allergy Foundation of America.

WILLIAM L. MEYERHOFF, M.D., Ph.D.
Dallas, Texas

Professor and Chairman, Department of Otorhinolaryngology, Southwestern Medical School, Graduate School of Biomedical Sciences, University of Texas Health Sciences Center. M.D., 1966, Northwestern University, Chicago. Member, American Academy of Facial Plastic and Reconstructive Surgery; American Auditory Society, Executive Board Member; American College of Surgeons; AMA; National Association for Hearing and Speech Action; Editorial Board, *Geriatrics*, and author of numerous publications.

Ky Society for Gastrointestinal Endoscopy
Meeting Room A — Bluegrass Convention Center
Thursday, September 25, 1986

2:00 p.m. **"Pathogenesis of Disorders of the Esophagogastric Junction"**
H. Worth Boyce, M.D., Tampa, FL

3:00 p.m. **Intermission to Visit Exhibits**

3:30 p.m. **"Diagnosis and Management of Barrett's Esophagus"**
Stephen A. McClave, M.D., Louisville, KY

4:00 p.m. **"The Diagnostic Yield of Endoscopic Retrograde Cholangiopancreatography (ERCP) in Carcinoma of the Pancreas"**
Norman H. Gilinsky, M.D., Lexington, KY

4:30 p.m. **"Systemic Estrogen Therapy for Bleeding Gastrointestinal Angiodysplasia"**
Mark H. Bronner, M.D., Louisville, KY

Ky Academy of Eye Physicians & Surgeons
Meeting Room F — Bluegrass Convention Center
Thursday, September 25, 1986

2:00 p.m. **"Lens Implantation 1986"**
Henry M. Clayman, M.D., Miami, FL

3:00 p.m. **Intermission to Visit Exhibits**

3:30 p.m. **"Yag Laser Complications"**
Henry M. Clayman, M.D., Miami, FL

3:45 p.m. **"The Government and Ophthalmology"**
Henry M. Clayman, M.D., Miami, FL

4:00 p.m. Business Meeting

Ky Society of Anesthesiologists
Julia Belle Ballroom — Bluegrass Convention Center
Thursday, September 25, 1986

2:00 p.m. **"Substance Abuse"**
C. R. Stephen, M.D., St. Louis, MO

2:40 p.m. **"Geriatrics: Anesthetic Considerations"**
Gordon Hyde, M.D., Lexington, KY

3:20 p.m. **Intermission to Visit Exhibits**

3:50 p.m. **"Bupivacaine Toxicity"**
Gregory W. Kasten, M.D., Lexington, KY

4:30 p.m. **"Subtypes of Opioid Receptors"**
Norman Pedigo, Ph.D., Lexington, KY

C. RONALD STEPHEN, M.D.
St. Louis, Missouri

Professor Emeritus of Clinical Anesthesiology, Washington University School of Medicine, St. Louis, Missouri; Chief of Anesthesia, St. Luke's Hospital-West; Consultant to United States Air Force and United States Navy; and Editor, *Survey of Anesthesiology*, Baltimore, Maryland. M.D., 1940, McGill University, Montreal, Canada. Member, AMA; American Society of Anesthesiologists; International Anesthesia Research Society; and Southern Society of Anesthesiologists.

WILLIAM B. APPLEGATE, M.D.
Knoxville, Tennessee

Associate Professor of Medicine and Community Medicine; Chief, Division of Geriatric Medicine, University of Tennessee Center for Health Sciences. M.D., 1972, University of Louisville School of Medicine. Member, Board of Directors, American Geriatric Society; the Tennessee Commission on Aging; Editorial Board, *Journal of the American Geriatric Society*; American College of Physicians; American Federation for Clinical Research and Physicians for Social Responsibility.

Ky Academy of Child Psychiatrists
Meeting Room I — Bluegrass Convention Center
Thursday, September 25, 1986

2:00 p.m. **"Fenfluramine & Autism"**
William Klykylo, M.D.,
Cincinnati, Ohio

3:00 p.m. **"Eating Disorder"**
Michael Ebert, M.D.,
Nashville, Tennessee

4:00 p.m. **"National Bulemia Survey The Diagnosis"**
Laurie Humphries, M.D.,
Lexington

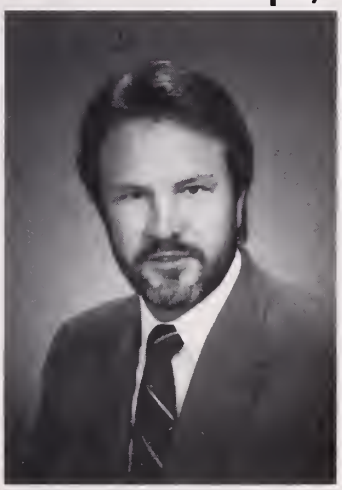
Ky Association of Public Health Physicians
Meeting Room J — Bluegrass Convention Center
Thursday, September 25, 1986

2:00 p.m. **"New Perspectives for the Public Health Physician in Tuberculosis"**
William Stead, M.D., Little Rock, Arkansas

3:00 p.m. Intermission to Visit Exhibits

3:30 p.m. Business Meeting

NEIL A. FENSKE, M.D.
Tampa, Florida



Associate Professor of Medicine; Director, Division of Dermatology, Department of Internal Medicine, University of Southern Florida College of Medicine, Tampa, Florida. Associate Professor of Pathology, Department of Pathology, University of Southern Florida College of Medicine, and Chief, Dermatology Section, James A. Haley Veterans Hospital, Tampa, Florida. M.D., 1973, St. Louis University School of Medicine. Member, AMA; Society for Investigative Dermatology; Fellow, American Academy of Dermatologists; Florida Medical Association; Pan American Medical Association; American Federation for Clinical Research; President-Elect, Southeastern Dermatologic Society. Director, University of Southern Florida Medical Outpatient Psoriasis Comprehensive Treatment Center.

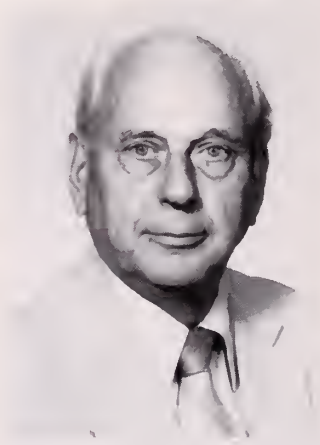
HENRY WORTH BOYCE, JR., M.D.
Odessa, Florida

Professor of Medicine, Department of Internal Medicine; Director, Division of Digestive Diseases and Nutrition, University of Florida College of Medicine, and President of Medical Staff, H. Lee Moffitt Hospital and Cancer Research Institute, University of Southern Florida. M.D., 1955, Bowman Gray School of Medicine, Winston-Salem, North Carolina. Member, American Society for Gastro-Intestinal Endoscopy, President 1974; American College of Gastroenterology; American College of Physicians; Southern Medical Association; American Society for Parenteral and Enteral Nutrition. Medical Adviser, *Journal of Society for Gastrointestinal Assistants*. Editorial Board, *Practical Gastroenterology*.

HENRY M. CLAYMAN, M.D.
Miami Beach, Florida

Clinical Associate Professor of Opthalmology, University of Miami School of Medicine, Bascom Palmer Eye Institute; Clinical Professor of Health Sciences, Miami-Dade Community College; Chairman, Department of Opthalmology, St. Francis Hospital, Miami Beach, Florida. M.D., 1966, State University of New York, Downstate Medical Center, New York City. Member, Florida Opthalmology Society; Florida Medical Association; AMA; Founding Member, American Intra-Ocular Implant Society; Fellow, American Academy of Opthalmologists. Author of numerous publications.

WILLIAM W. STEAD, M.D.
Little Rock, Arkansas



Director, Tuberculosis Program, Arkansas Department of Health, and Professor of Medicine, University of Arkansas for Medical Sciences, Little Rock. M.D., 1943, Emory University, Atlanta, Georgia. Member, American Federation for Clinical Research, President 1959–60; American Board of Internal Medicine; Wisconsin Thoracic Society, President 1966–68. Fellow, American College of Chest Physicians and American College of Physicians. Author of numerous publications.

Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

* **WARNING**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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Serum K^+ and BUN should be checked periodically (see Warnings and Precautions)

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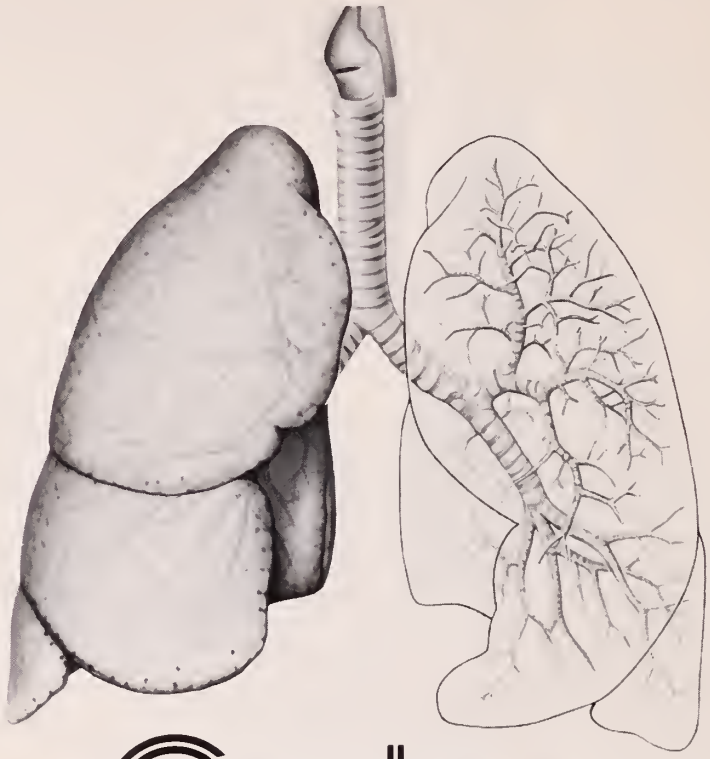

Ceclor®
cefaclor

250-mg Pulvules® t.i.d. offers effectiveness against the major causes of bacterial bronchitis

Haemophilus influenzae, H influenzae, Streptococcus pneumoniae, Streptococcus pyogenes
(ampicillin-susceptible) (ampicillin-resistant)

Note: Ceclor® is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor® (cefaclor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae, Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci).

Contraindications: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:
- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:
- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

Abnormalities in laboratory results of uncertain etiology
- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest® tablets but not with Tes-Tape® (glucose enzymatic test strip, Lilly)

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Summaries of General Sessions Presentations 1986 KMA Annual Meeting

Treatable Causes of Visual Loss in the Elderly
Henry M. Clayman, M.D.

Visual loss may be associated with ocular and systemic disease and both are more common in the elderly patient. Most opacities of the ocular media are now treatable by a variety of invasive and non-invasive techniques which can often be performed on a outpatient basis. The prognosis of visual loss in the elderly is much improved and the current ophthalmic state of the art in this regard will be discussed.

What Aging Processes are Reliable and Valid Indications for Retirement?
Robert H. Jones, M.D.

Chronological age is a poor indicator of ability, which varies increasingly with advancing age. Lacking a functional age descriptor to substitute for chronological age, one is left with observations of skill and productivity as measures for decision. Age does take its toll in heavy, rapid-paced, dexterous and some complicated jobs. But, the importance of experience, wisdom and judgement in balancing these losses is often overlooked or hidden by age stereotyping, prejudice and bias.

Death in Peace or in Pieces
C. Ronald Stephen, M.D.

By means of the presentation of a case history, the dilemmas today facing the medical profession, the legal profession, sociologists and ethicists will be discussed. How to treat the terminally ill, older patient is a national problem growing more acute each day. The 29 million elderly patients surviving today (12% of the population) will double by the turn of the century.

The Interface of Mental and Physical Health Phenomena in Geriatrics
Gene D. Cohen, M.D.

The impact of mental status and emotional state on the course of overall health and physical illness with aging is an enormously underappreciated public health issue. Various paradigms will be provided to help better define clinical as well as research approaches to the geriatric patient, with attention to the interface of mental and physical health phenomena in later life.

Atherosclerotic Risk Factors in the Child and Adolescent
Donald A. Riopel, M.D.

The more important risk factors associated with atherosclerosis will be examined specifically from the viewpoint of children and adolescents. Evidence from major ongoing population studies in children will be presented. Since pediatricians have been involved in preventive medicine for many years, so too might they have an impact on atherosclerosis by preventive measures while at the same time not compromising the health of growing children.

Pathology of the Aging Heart: What are the Questions?
Grover Hutchins, M.D.

Some forms of myocardial and valvular heart disease become more frequent with advancing age; it is not always evident if these disorders are to be considered an expected consequence of aging or are simply an accumulation of lesions because of increased longevity. Autopsy studies continue to be of value in determining the incidence, significance, and pathogenesis of heart disease in the elderly. Several of the more common cardiac lesions encountered in the hearts of aged patients will be described and their nature discussed.

Breast Cancer: Contrasted in Young and Aging Women
Robert L. Egan, M.D.

Breast cancer, as the most common cancer in women, increases in frequency with the age of the patient. Women age 50 years and younger made up 66% of our study population of 58,746 women with 32% of the cancers, those age 51-65 years 24.4% of the population with 40.5% of the cancers and those age 65 years and older 9.7% of the population with 27.9% of the cancers. The biopsy rate increased steadily with 26% in the younger women to over 50% for the older women with the percentage of cancer per biopsy ranging from #% in the younger to 67% in the older group of women.

The mammographic parenchymal breast pattern of the physiologically older women permits frequent diagnoses of 3 mm or less size carcinomatous masses. These readily detectable small lesions have a low incidence of axillary lymph node metastasis while in the denser, nodular breasts of younger women diagnosis based on masses is often delayed until the lesion is larger and more often associated with axillary lymph node metasis. Hence, prognosis is better in the older women.

In one series evaluated by our oncologic surgical colleagues of 19,919 women 61% of the cancers were suspected in women under age 35 years, in 76% of the cancers in the 35 to 50 age group but in 88% of the cancers in women past 50 years. In this series a single mass, regardless of its characteristics, detected in the breast of a woman over age 60 years proved to be cancer 82% of the time.

Although the rate of cancer is markedly increased with advanced age, it can be detected clinically and by mammography at a smaller size and earlier stage with improved prognosis. More indolent cancers, as mucinous and intracystic papillary carcinomas, occur in older women. Less aggressive surgical procedures are required in these early and more favorable cancers.

Hypertension in the Elderly
Mark Houston, M.D.

Objectives

1. Review pathogenesis of hypertension in the elderly.
2. Review nonpharmacologic treatment.
3. Review specific hypertensive drug therapy.
4. Discuss clinical pharmacology of anti-hypertensive medications for specific use in the elderly.
5. Review complications and advantages of treatment of hypertension in the elderly.

Prostatic Carcinoma in the Aging Male
David F. Paulson, M.D.

Carcinoma of the prostate presents a significant health risk to the aging male. The current philosophy of management predicates treatment selection on the anatomic distribution of disease within the patient. The distribution of disease within the patient can best be assessed by sequential application of serum acid phosphatase, isotopic bone scan and staging pelvic lymphadenectomy. For disease which is confined to the primary organ of origin (Clinical Stage A_2 and b), randomized studies would indicate that radical surgery provides enhanced disease control over radiation therapy. For bone scan, node-negative, Stage C prostatic adenocarcinoma, the rate at which disease dissemination occurs is equivalent whether patients are randomly assigned to either external beam radiation therapy or to no treatment. This raises the issue as to the suspected impact of external beam radiation therapy being nothing more than observation of the natural history of the disease. Node-postive diseases have an ominous prognosis, half of all patients with node-positive prostatic adenocarcinoma demonstrating metastatic spread within two years, whether they are actively treated or receive no treatment. Current philosophy is to delay treatment in these patients until such time as they demonstrate progression and then to initiate androgen deprivation therapy. Patients who present with widespread disease are actively treated with androgen deprivation when the rapidity with which their disease progresses can be identified or when they begin to become symptomatic.

Care of the Elderly in a Changing Economy
Jon C. Calvert, M.D., Ph.D.

Over the next two decades, the number of elderly will markedly increase, not only in actual numbers but also as a percentage of the total population. The medical community has been addressing the issue of how to best provide medical care for this growing segment of our population. These changing economic forces are cause to reexamine alternatives to meeting the medical needs of this segment of our society. An understanding of the past and present economic factors, as well as a projection of future economic trends is necessary in order that the medical profession can best position itself for the future.

Diagnosing the Cause of Hearing Loss
William L. Meyerhoff, M.D.

Too often, physicians have labeled hearing loss in the elderly as "presbycusis," and without investigating further, have recommended a hearing aid. This approach denies the patient proper medical diagnosis and the opportunity for medical or surgical treatment.

Diagnosis of the underlying cause of acquired deafness is essential. Hearing loss is associated with many genetic syndromes, but may appear before other symptoms. It also may be secondary to inflammatory disease, ototoxicity, neoplasm, injury, metabolic disorders, vascular insufficiency, Ménière's disease and occasionally CNS disorders.

When a patient presents with a hearing loss, a thorough history and physical examination, followed by audiologic examination, are mandatory. The diagnosis is usually evident, and treatment should be considered before rehabilitation is attempted.

Do Childhood Asthma and Other Chronic Lung Diseases Relate to Chronic Lung Diseases in the Elderly?"

Roger Katz, M.D.

It has long been thought that asthma in childhood can lead to emphysema in the adult. Evidence for this begins in 1902 and is promoted through quotations in 1948. Evidence includes that related to chronic cough and the changes in pulmonary tree that relate to coughing in addition to the development of barrel shaped chest in childhood and gradual increase in breathlessness as it relates to asthma. However, all that wheezes is not asthma and the discussion shall include those diseases which may look like asthma, but which in fact are other lung disease states. The final notation is that asthma is a hyper-responsiveness of the airways to a variety of stimuli and that this disease is reversible.

Childhood Hip Disease — Late Effects in the Adult

Anthony J. Bianco, Jr., M.D.

Arthritis of the hip, while not life threatening, often adversely affects quality of life in the adult. Several hip conditions which occur in childhood, if not properly treated, often result in early arthritis. Early diagnosis and prompt treatment in childhood, can often prevent, or at least delay, development of arthritis of the hip in the adult.

The Aging Patient; The Benefits and Assistance of Plastic Surgery

John C. Kelleher, M.D.

In planning any surgery on the aging patient we must keep in mind the fact that the circulation to most parts of the body is less than exists in the young healthy patient. The metabolism is less vigorous and there may be the deleterious effects of previous cardiac, renal, hepatic and peripheral circulatory problems. It is rather obvious that these factors must be kept in mind in the planning for reconstructive or aesthetic plastic surgery.

It is the intent to review some specific areas of interest to the aging patient and what the plastic surgeon might offer in the way of assistance and information not only to the patient but to his conferrers in family practice, gynecology and internal medicine.

Drug-Induced ("Pill") Esophagitis: The Scourge of the Elderly

H. Worth Boyce, Jr., M.D.

Few clinicians today are aware of the severe, even lethal, esophageal injury that can result from taking "pills" of many types. This problem likely has been around for many years, but only recently has begun to be recognized as being of major importance.

The number of therapeutic agents that may produce acute esophagitis are steadily increasing in number but this condition often is not suspected by physicians. Several drugs are known to produce mucosal ulcerations, mucosal slough and pseudomembrane formation and variable degrees of stenosis or stricture. A common factor in the genesis of this form of esophagitis seems to be some degree of esophageal "physiologic" narrowing, organic obstruction or a motor abnormality. When no esophageal obstruction is present, the patient usually gives a history of taking the medicine while in a recumbent position or just before retiring at night without sufficient liquids. The obstructive problems that seem to enhance the development of drug-induced injury most often are esophageal stenoses due to inflammation. Drug-induced esophagitis also may be associated with esophageal motor abnormalities such as esophageal spasm or with left atrial enlargement related to congestive heart failure or mitral valve disease. Atrial enlargement may cause compression and partial occlusion of the esophageal lumen. The most common etiologic factors for "pill" esophagitis are: (1) taking the drug without adequate fluid; (2) the recumbent position; (3) the size of tablet or capsule; and (4) the chemical composition of the drug.

The Patient With TIA's

Robert A. Ratcheson, M.D.

Cerebral infarction is the third most common cause of death and the major factor in disability in the United States. For many in whom the premonitory symptoms of carotid occlusive disease are recognized, the devastation of paralysis and aphasia can be avoided. Fisher, in 1951, indicated that disease of the internal carotid artery played a major factor in cerebral infarction by recognizing that carotid occlusion was often the result of thrombosis superimposed upon an enlarging subintimal atheroma and that thrombotic fragments could embolize to the intracranial cerebral circulation. He stressed the occurrence of fleeting symptoms, including monocular blindness and hemiplegia. Although risk factors for stroke include hypertension, hyperlipidemia, diabetes mellitus, coronary and peripheral artery disease, the most significant factor is the prior occurrence of transient cerebral episodes (TIA).

Physiology of Aging

William B. Applegate, M.D., M.P.H.

I. Demographic Changes
   A. Proportion of population over age 65 has increased from 4% in 1900 to 17% in year 2010.
   B. The reason for this increase is primarily a reduction in perinatal mortality and decline in infectious disease mortality.
   C. In this century, life expectancy has increased most for the young, but there have been recent increases in life expectancy even for the oldest age groups.

II. Changes in Cell Biology
   A. Hayflick has demonstrated that cells grown in vitro have a finite life span and that the control of the life span may reside in the nucleus of the cell.
   B. As cells age, there are a host of changes which occur, including mutations, errors in RNA transcription, and reduction in the energy-producing capacity of the mitochondria.
   C. Changes in function at the organ systems level cannot be due merely to cell loss, but most reflect basic changes in function at the cellular level.

III. Changes at the Organ System Level
   A. Under conditions of stress, performance of most organ systems declines in a linear fashion after age 30. It is unclear whether there is an immediate preterminal drop in function.
   B. Since most organ systems have extensive reserve capacity, changes in performance are less evident in nonstressful or baseline states than under conditions of stress until a person reaches ages 75-85, the *old, old.*
   C. There are extremely wide inter- and intra-individual differences in the rate of aging. There are probably a variety of factors which affect the rate of aging for a specific organ system, including genetics and lifestyle.

IV. Nervous Systems
   A. The mass of the human brain shrinks about 15-20% between ages 20-65. The density of neurons in the cerebral cortex declines with age, but the decrease in brain mass mentioned above is also due to a decrease in the cell types and tissues in the brain.
   B. There are some changes in intellectual performance which occur with age. Verbal abilities, including standard IQ scores, change little across the human life span in the absence of disease. Fluid intellectual abilities, particularly timed tests, do decline with age. It is unlikely that aging-related changes alone (in the absence of disease) ever lead to gross disorientation.
   C. Changes in the peripheral nervous system include a decrease in nerve conduction velocity. Changes in the autonomic nervous system result in an increase in the prevalence of postural hypotension (in the absence of disease).

V. Cardiovascular System
   A. As humans age, most tissues become less elastic because of breakdown of elastic fibers and increased cross-linking of collagen fibers. Because of this and because atherosclerosis is rampant in Western societies, compliance and the major blood vessels declines with age. As a result, systolic blood pressure tends to rise throughout the life span.
   B. Cardiac output, at rest (in the absence of disease), probably does not decline with age, but cardiac output with maximal exercise does decline.
   C. There is a substantial increase in both atrial and ventricular ectopic (or premature) beats with age.
   D. In the absence of disease, the aging cardiovascular system continues to respond to regular aerobic exercise with an increase in capacity. It is not known if steady exercise throughout life can alter the slope of the age-related decline in maximal cardiac output, but it is clear that the oxygen consumption (a measure of cardiovascular fitness) of a 65-year-old person who exercises regularly is equivalent to that of a much younger sedentary person.

HAPPENINGS!

Leadership Conference will be held on August 27th at the Greenwood Executive Inn, Bowling Green. Kay Connally is the chairman and has planned a fun and informative meeting.

Schedule:

Registration	9:00 a.m.–10:00 a.m.
Round Table Discussion (with state chairmen)	10:00 a.m.–11:00 a.m.
Coffee Break	11:00 a.m.–11:15 a.m.
Doctor James Frank, Guest Speaker	11:15 a.m.–12:15 p.m.
Luncheon	12:30 p.m.– 2:00 p.m.

All times are Central Daylight Time.

Fall Board

We want to take this opportunity to extend an invitation to everyone to attend the Fall Board of the AKMA. It will be held this year on September 22 and 23 at the Ramada Inn Bluegrass in Louisville.

In addition to the meetings, we have planned a wonderful luncheon and exciting tour of the historical Kentucky Derby Museum. We hope you will come join us for all of the activities.

The *tentative* schedule for Fall Board:

Monday, September 22:	
Hospitality Room Open:	10:00 A.M.–5:00 P.M.
Registration:	10:00 A.M.–2:00 P.M.
The following Committees will convene:	
Planning, Membership, Health Projects,	
Finance, Executive, AMA-ERF	11:00 A.M.–5:00 P.M.
KEMPAC Dinner/Cash Bar	7:00 P.M.
Tuesday, September 23:	
Hospitality Room Open:	8:00 A.M.– 9:00 A.M.
Registration:	8:30 A.M.–11:30 A.M.
Board Meeting:	9:00 A.M.–12:00 Noon
Luncheon and Tour of Kentucky Derby Museum	1:00 P.M.– 3:30 P.M.
Wednesday, September 24:	
Hospitality Room Open:	8:00 A.M.–12:00 Noon

Please watch the September issue of "Bluegrass News" for additional information and pre-registration form.

Phyllis Cronin
President AKMA

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Latest Research Advances in Products and Services Offered by 1986 Technical Exhibits

The Technical Exhibits at the 1986 KMA Annual Meeting will feature the latest developments in medical techniques and information. Located in the Ramada Inn East Convention Center, the exhibits will condense a volume of information and ideas in such a manner that a vast amount of knowledge can be secured in a short period of time.

Prepared carefully and skillfully to appeal to you, the physician, the exhibits are especially geared to your special interests as a practitioner. Medical representatives and other exhibitors will be on hand to discuss personally their products and services with you. Both you and your patients should benefit from the information that can be gained from a visit to the Technical Exhibits.

Thirty-minute intermissions have been planned during each general and specialty group session so that every physician may take advantage of this excellent opportunity provided by the exhibits.

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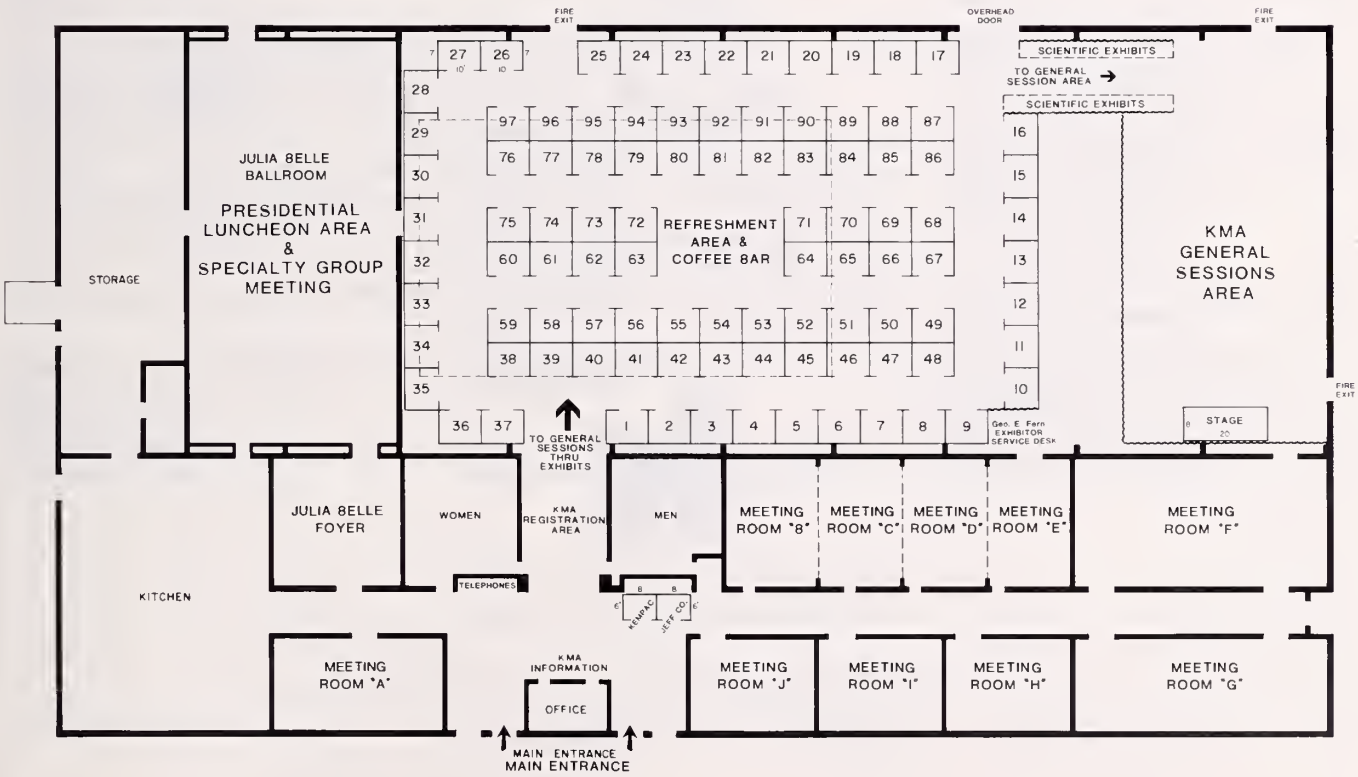

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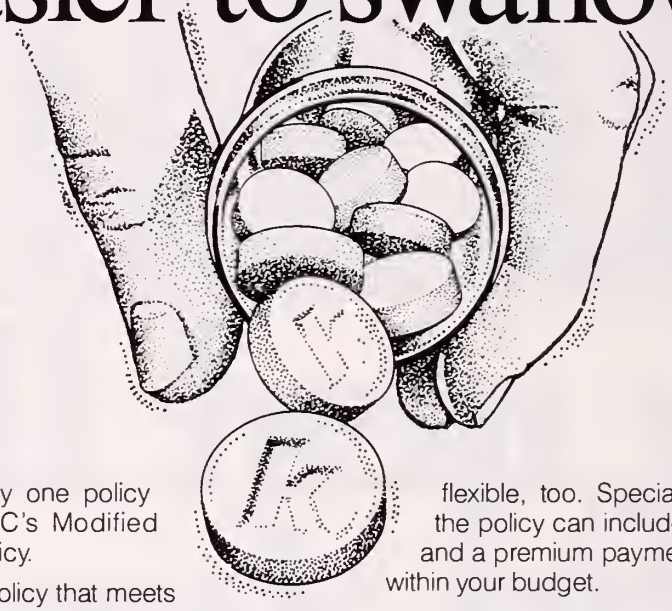

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IMX, INC. (30)
INFO-MED, INC. (8)
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ESPECIALLY FOR
KENTUCKY PHYSICIANS

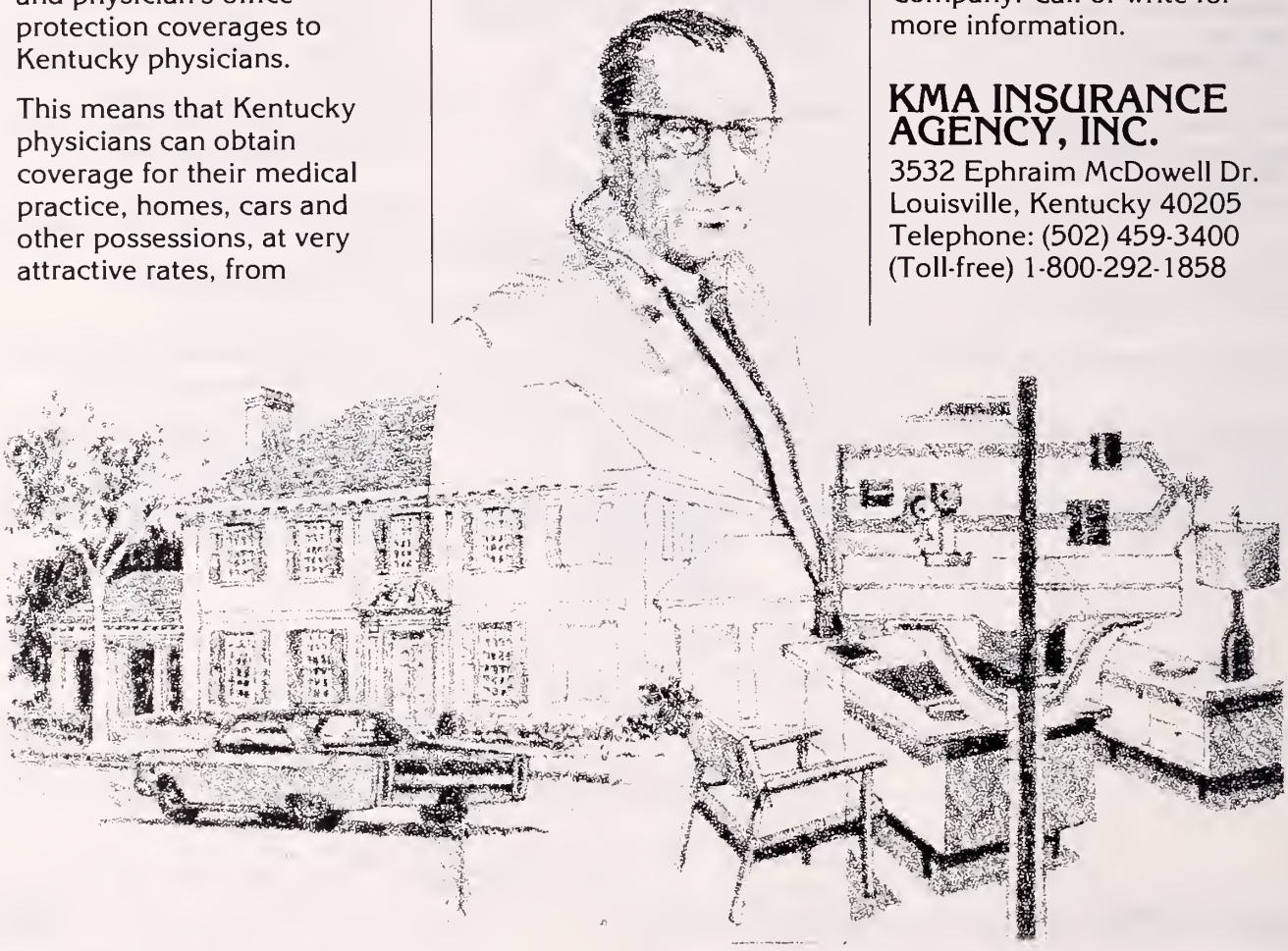
HOMEOWNERS & AUTO INSURANCE
PHYSICIAN'S OFFICE PROTECTION

PICO, the Ohio physician-owned insurance organization that assisted in the formation of Kentucky Medical Insurance Company, is offering homeowners, auto and physician's office protection coverages to Kentucky physicians.

This means that Kentucky physicians can obtain coverage for their medical practice, homes, cars and other possessions, at very attractive rates, from companies that really have their best interests in mind.

PICO's insurance services in Kentucky are endorsed by the Kentucky Medical Association and are offered through KMA Insurance Agency, Inc., in cooperation with the Marketing Department of the Kentucky Medical Insurance Company. Call or write for more information.

KMA INSURANCE AGENCY, INC.
3532 Ephraim McDowell Dr.
Louisville, Kentucky 40205
Telephone: (502) 459-3400
(Toll-free) 1-800-292-1858



From the land of *fast horses, beautiful women, mellow whiskey and bluegrass* comes another sure winner. For physicians who want the best of everything, **Software for Professionals** proudly presents the **Patient Data Query** computer system.

Patient Data Query can provide a powerful range of useful capabilities in streamlining the overall operations of your medical office. Maintenance of patient records, ledgers, and financial information is accomplished in a matter of seconds. The **PDQ** system maintains personalized lists of your procedures, service fees, diagnoses and other necessary information. It handles everything automatically, including insurance forms, statements, day sheets, check registers, aged accounts receivable, and many other tasks necessary for your office operation.

We look forward to the opportunity of showing you how the **PDQ** can add to the success of your practice. If you would like to arrange for a demonstration or if we may be of service to you in any way regarding computers, please feel free to call us at our home office anytime at **(606) 278-8225.**

Oh Kentucky, you've done it again!

PDQ

PATIENT DATA QUERY
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340 S. BROADWAY Suite 202
LEXINGTON, KY. 40508
(606) 255-1314

Memo From. . .

APL Bud Ernst

A.P. LEE AGENCY, INC.

Insurers of Professional Groups Since 1939

WE ARE YOUR OFFICIALLY SPONSORED DISABILITY INCOME INSURER.

FOR LOW COST COVERAGE WHEN YOU FIRST ENTER PRACTICE OR RESIDENCY TRAINING, WE ARE DIFFICULT TO BEAT!

CALL (502) 583·1888
COLLECT

OR WRITE TO ME OR STEVE PARKER, MY NEW ASSOCIATE, AT:

631 LINCOLN SQUARE
LOUISVILLE KY.
40202

Technical Exhibits

A. H. ROBINS COMPANY **Booth #1**
1407 Cummings Drive
Richmond, Virginia 23220
(804)257-2563
You are cordially invited to visit the A. H. Robins exhibit and meet our representatives who will welcome the opportunity to discuss our products, Reglan and Micro-K.

A. P. LEE AGENCY, INC. **Booth #48**
631 Lincoln Square
Louisville, KY 40202
(502)583-1888
Disability income coverage since 1939. We now have more realistic monthly benefits in both disability income and office expense programs. The individual contract provides "your occupation" coverage at group rates. Since we're as near as your phone, the claim service is second to none.

ABBOTT LABORATORIES **Booth #39**
14th and Sheridan Road
North Chicago, IL 60064
(312)937-3280
You are cordially invited to visit the Abbott exhibit which will feature TRANXENE® (clorazepate dipotassium), E.E.S.® (erythromycin ethylsuccinate), OGEN® (estropipate tablets, USP) and other pharmaceutical products.

AMERICAN PHYSICIANS LIFE **Booth #74**
13515 Yarmouth Dr. NW
Pickerington, OH 43147
(614)864-3900
American Physicians Life (APL) is a regional life insurance organization that has established operations throughout the midwest in cooperation with other medical associations and physician-owned entities. APL specializes in life insurance and financial planning services to meet physicians' personal and business needs.

AMERICAN PHYSICAL THERAPY GROUP **Booth #66**
Medical Heights, Suite 505 2366 Nicholasville Rd.
Lexington, Kentucky 40503
(606)278-2121
American Physical Therapy Group provides staff, equipment and management for physical therapy services in health care facilities, such as hospitals, clinics, physicians' offices and others. APTG is a Kentucky owned corporation which manages the services by recruiting and employing both professional and ancillary staff, by efficient daily operations, by assuring quality and by marketing the services to the community. This kind of arrangement helps gain the competitive advantage necessary in today's health care delivery system.

AMES DIVISION **Booth #80**
P.O. Box 70
Elkhart, IN 46515
(219)262-7846
Diagnostic Instrumentation.

AYERST LABORATORIES **Booth #47**
685 Third Avenue
New York, NY 10017-407
Our representatives look forward to a visit with you, and for the opportunity to discuss the Ayerst products and services of interest to you.

BEECHAM LABORATORIES **Booth #7**
501 Fifth Street
Bristol, TN 37620
(615)764-5141
Four Beecham products will be displayed, Augmentin®, Timentin®, Nucofed®, and Tigan®. Emphasis will center on the first two products mentioned above, which are the first members of a new class of antibiotics - beta-lactamase inhibitors.

BERLEX LABORATORIES, INC. **Booth #72**
300 Fairfield Road
Wayne, New Jersey 07470
(201)694-4100
Berlex Laboratories invites members and guests of the Association to visit their booth featuring the recently introduced oral contraceptives LEVLEN™ and TRI-LEVLEN™. Our representatives in attendance will welcome your inquiries regarding these and our other fine products.

BLUE CROSS & BLUE SHIELD & DELTA DENTAL OF KENTUCKY **Booth #23**
9901 Linn Station Road
Louisville, KY 40223

The 1986 Blue Cross and Blue Shield Exhibit will offer physicians the opportunity to meet with representatives of the Provider and Professional Affairs Division. Our representatives will be present at the booth to answer any questions you may have.

BOEHRINGER MANNHEIM DIAGNOSTICS **Booth #20**
9115 Hague Road
Indianapolis, IN 46250
(317)845-8480
We will be exhibiting one of the biggest breakthroughs in Diabetes Management. . .Self Blood Glucose Monitoring. . .with the latest technology in instrumentation, the ACCU-CHEK II. We will also be exhibiting the #1 visually read strip on the market. . .Chemstrip Bg, for those patients that do not want or can not afford an instrument. We will also be exhibiting ways to cut costs in Urinalysis testing with Chemstrip 9's.

BOEHRINGER INGELHEIM **Booth #36**
90 East Ridge, P.O. Box 368
Ridgefield, CT 06877
(203)438-0311

BRISTOL LABORATORIES **Booth #62**
P.O. Box 4755
Syracuse, NY 13221-4755
(315)432-2799

BURROUGHS WELLCOME **Booth #4**
3030 Cornwallis Road
Research Triangle Park, NC 27709
(919)248-3481
Representatives of Burroughs Wellcom Co. cordially invite you to visit booth no. 4. Our exhibit will feature the latest product information available from B. W. Co. and provide educational material of interest to all physicians. We will be pleased to answer your inquiries on any products of interest to members and guests.

CARDINAL HILL HOSPITAL **Booth #19**
2050 Versailles Road
Lexington, KY 40504
(606)254-5701, EXT. 240
Each year losses to occupational diseases and injuries are staggering in terms of human pain, suffering and loss of profits. Work related illness and injury can be substantially decreased or eliminated by an Industrial Rehabilitation Program which emphasizes evaluation, prevention, treatment, and return to work. This program may be of assistance to physicians throughout Kentucky by offering: comprehensive pain evaluation and management, functional/physical capacity evaluation, ergonomics, physical and occupational therapy, psychological testing and counseling, and disability evaluation.

CENTRAL PHARMACEUTICALS, INC. **Booth #53**
120 East Third Street
Seymour, IN 47274

CHARTER RIDGE HOSPITAL **Booth #24**
3050 Rio Dosa Drive
Lexington, Kentucky 40509
(606)269-2325
Charter Ridge Hospital in Lexington is the only free standing facility in central Kentucky specializing in the treatment of psychiatric illness and addictive disease. A wholly-owned subsidiary of Charter Medical Corporation, it was opened in August 1982. Four separate and distinct treatment programs have been developed by Charter Ridge to address these specific needs of the community: Child Psychiatric Services, an Adolescent Treatment Program, Adult Psychiatric Services, and an Adult Addictive Disease Program.

CHARTERTON HOSPITAL **Booth #57**
507 Yager Avenue
La Grange, Kentucky 40031
(502)222-7146
Charterton Alcohol and Drug Abuse Treatment Hospital is a licensed and accredited acute psychiatric Hospital specializing in chemical dependency in-patient and out-patient care. We provide intense personalized services in a residential rather than institutional environment using a multi-disciplinary approach. Charterton's Hospital's policy is to keep a referring physician informed of his/her patient's progress during treatment. Upon discharge, the patient is placed back in the care of the referring physician.

CLAYTON L. SCROGGINS ASSOCIATES, INC. **Booth #12**
200 Northland Boulevard
Cincinnati, Ohio 45246
(513)771-7070
Professional practice management and financial planning for doctors exclusively. An organization of qualified, experienced professionals providing impartial counsel in a professional, comprehensive and confidential manner. Individualized determination of each client's needs on a fee-for-service basis, offering total objectivity on which our reputation depends. Services throughout Kentucky, Ohio and Indiana.

COMMUNITRONICS, INC. **Booth #95**
10101 Linn Station Road, Suite 580
Louisville, KY 40223
(502)425-4166
We will be demonstrating a "complete" practice management program by "CYMA," McGraw/Hill. Our services will provide a computerized turnkey solution for all the office and business needs of the doctor's office. This solution is practical for the sole practitioner or up to a 26 practitioner clinic.

CONVATEC-A SQUIBB COMPANY **Booth #28**
P.O. Box 4000
Princeton, New Jersey 08543-4000
(201)359-9200
CONVATEC is the leader in the wound management field with "Duoderm," a dressing used for pressure sores, leg ulcers, second degree burns and donor sites. We also developed "Stomahesive" and the "Surefit System" which revolutionized ostomy care. CONVATEC is also known for its incontinence products "Urihesive" (male external catheter) and "Dignity" (a pad in pants alternative to diapers).

CROCKER-FELS CO. **Booth #10**
990 Dalton St.
Cincinnati, Ohio 45203
(513)381-7700
Featuring quality ABCD branded products, laboratory equipment and supplies.

DISTA PRODUCTS COMPANY **Booth #79**
Lilly Corporate Center
Indianapolis, IN 46285
(317)261-2554
You are cordially invited to visit the Dista Products Company exhibit. Our sales representatives in attendance will welcome your questions about our pharmaceutical products. Our featured products are: Keflex® (cephalexin, Dista) and Nalfon® (tobramycin sulfate, Dista)

DISABILITY DETERMINATIONS **Booth #14**
P.O. Box 1000
Frankfort, Kentucky 40602
(502)564-5132
Our agency prepares Social Security and Supplemental Security Income disability determinations on Kentucky applicants. The Professional Relations staff will be available to answer questions, explain the new disability criteria and talk with physicians interested in performing consultative examinations on approximately 25,000 applicants each year across the state.

DORSEY PHARMACEUTICALS **Booth #13**
59 Route 10
East Hanover, NJ 07936
(201)386-8005
Dorsey Pharmaceuticals invites you to stop by our exhibit where our representative(s) will be pleased to provide information on our products or on educational materials that we have available.

E.R. SQUIBB AND SONS, INC. **Booth #59**
P.O. Box 4000
Princeton, New Jersey 08543-4000
(609)921-4624
E.R. SQUIBB & SONS, INC. has long been a leader in the development of therapeutic and diagnostic products for the prevention, detection and treatment of diseases. You are cordially invited to meet our representatives who will be available at our exhibit to discuss our full line of health care products.

ELI LILLY AND COMPANY **Booth #16**
Lilly Corporate Center
Indianapolis, IN 46285
(317)261-2554
You are cordially invited to visit the Eli Lilly and Company exhibit. Our sales representatives in attendance will welcome your questions about our pharmaceutical products. Our featured products are: Humulin® (human insulin of recombinant DNA origin, Lilly) and Ceclor® (cefaclor, Lilly).

FRAZIER REHAB CENTER **Booth #78**
220 Abraham Flexner Way
Louisville, Kentucky 40202
(502)582-7400
Frazier Rehab Center is a private, non-profit, 64-bed facility dedicated solely to the concept of rehabilitation. Patients come to Frazier Rehab Center on both an inpatient and outpatient basis, disabled from stroke, amputation, head injury, polyarthritis, major multiple trauma, complicated fracture, burns, spinal cord injury and other orthopedic and neurological disorders.

GEIGY PHARMACEUTICALS **Booth #83**
Summit, New Jersy

GERBER PRODUCTS COMPANY **Booth #5**
445 State Street
Fremont, MI 49412
(616)928-2257
Visit our booth featuring Gerber Baby Foods and childcare products such as Gerber and NUK nursers, nipples, breast pumps and Hankscraft humidifiers including our new Ultra-sonic. Discuss our product information and patient booklets with our Medical Service representative.

GLAXO INC. **Booth #87**
c/o Mr. George C. Glass, Regional Manager
47 Perimeter Center East, Suite #330
Atlanta, GA 30346
(404)668-0455
"You are cordially invited to visit the Glaxo Exhibit, where a Glaxo representative will be available to answer your questions and discuss the latest clinical information on Trandate®, Zantac®, Fortaz® and Ventolin®.

GUILD OF PRESCRIPTION OPTICIANS OF KENTUCKY **Booth #38**
P.O. Box 1063
Louisville, KY 40210
502/583-0687
Eyeglasses Adjusted-visit our booth to have your eyeglasses properly adjusted for maximum comfort and visual benefit. Minor repairs also can be made on the spot. Free Distance and Near Vision test cards, for use by the general practitioner, are offered. Your Guild Optician works closely with the ophthalmologist to provide the best in visual aid appliances. Support the Eye Physician Guild Optician type of eye services for better eye care.

HEALTH DATA NETWORK **Booth #51**
P.O. Box 4478
Louisville, Kentucky 40204
(502)585-1391
Health Data Network will demonstrate an on-line computer system for the management of patient billing and accounts receivable, accounts payable, general ledger and payroll in the physician's office. Graphic illustration on electronic claims processing, a service available to physicians for faster claim settlement and reduced paper work will also be provided. Samples of patient billings, collection letters, third-party payor billings and reports to aid in practice management will be available.

HEARING AID ASSOC. OF KENTUCKY Booth #18
140 W. Pike
Covington, KY 41011
(606)431-2266
Provide services to the hearing impaired including hearing testing and fitting hearing aids.

HOECHST-ROUSSEL PHARMACEUTICALS INC. Booth #94
Route 202-206 North
Somerville, New Jersey 08876
(201)231-2727
DiaBeta® - After 14 years in worldwide use in over 95 countries, DiaBeta® (glyburide) is now available in the United States. Please stop by our booth to allow us to answer any of your questions about the world's most widely prescribed oralhypoglycemic. Trental® (pentoxifylline) is the first proven effective agent for the treatment of intermitent claudication symptomatic of peripheral vascular disease. Trental® has been shown to improve red cell flexibility and lower blood viscosity. Stop by the Hoechst-Roussel Pharmaceuticals Inc. exhibit for more information about this exciting new treatment for intermittent claudication.

HUMANA INC. Booth #69
Humana Bldg. 500 W. Main Street
Louisville, KY 40201
(502)580-3571
Humana is an integrated health care services company that owns and operates 87 hospitals, including seven in Kentucky - Louisville (4), Lexington, Louisa and Somerset. Physicians are needed, in various specialties, to join members of our medical staff in these communities. Stop by our booth to discuss these opportunities, or any questions you may have about our fast growing health care plan - Humanacare Plus.

IMX INC. Booth #30
10200 Linn Station Road Suite 270
Louisville, Kentucky 40223
(502)426-3954
We are a financial and medical information service for the health care industry. If you are interested in better cash flow, reduced administrative expenses, lower bad debts and greater flexability, stop by and look us over. The versatility and value of our service will surprise you.

INFO-MED, INC. Booth #8
3520 New Hartford Road
Owensboro, KY 42301
(502)926-4781
The INFO-MED booth will be designed to display the application software package MEDICOMS which is designed as a total receivables management package for medical offices. It can satisfy the requirements of a single-doctor private practice, a multidoctor practice, or a general medical clinic. Its primary functions support the generation of patient statements and third-party insurance claim forms preparation. It manages receivables, tracking productivity and aging open accounts and providing flags and messages to aid collection. Included with this function is a delinquent collections subsystem. Secondary benefits of the system provide for medical analytical abilities utilizing CPT and ICD-9 standard codes for diagnosis and procedures. The system is menu-driven and operator-friendly.

INTERNATIONAL MEDICAL ELECTRONICS, LTD. Booth#75
2805 Main Street
Kansas City, Missouri 64108
(816)221-0115
INTERNATIONAL MEDICAL ELECTRONICS, LTD. manufacturers of sophisticated medical equipment, featuring Magnatherm short-wave diathermy with two detachable heads. Offering the ability to treat two separate areas or one from two directions at the same time. Please stop by Booth #75 for a demonstration.

INTERNATIONAL CLINICAL LABORATORIES Booth #68
135 East Maxwell
Lexington, KY 40508
(606)255-3676
International Clinical Laboratories, Inc. (ICL) is a full service reference laboratory offering routine as well as specialized analysis in the disciplines of chemistry, endocrinology, toxicology, immunology, microbiology, immunohematology, clinical microscopy, serology and hematology. Dedicated to providing diagnostic services of the highest quality. ICL's team of professionals exhibit expertise from all areas of the laboratory.

J.B. ROERIG Booth #15
4360 Northeast Expressway
Doraville, Georgia 30340
(404) 448-6666
The most recent clinical data on Cefobid and Glucotrol will be featured by J.B. Roerig. At different times we will be represented by Gary Underwood, Hugh Runner, Felix Holiday, Ray Tew, Jim Morgan and Jim Michael.

JANSSEN PHARMACEUTICA Booth #32
40 Kings Bridge Rd.
Piscataway, N.J. 08854
Ever since 1953, Janssen Pharmaceutica has pioneered in the fields of psychiatry, anesthesia and analgesia, gastroenterology, mycology, parasitology, allergy and cardiovascular research. At this time, over 50 original products of Janssen Research have found important use in human and veterinary medicine. Please feel free to stop by our booth and find out the latest in Janssen Research.

JEWISH HOSPITAL **Booth #26,27**
217 E. Chestnut Street
Louisville, KY 40202
(502)587-4011
As a result of Jewish Hospital's highly qualified physicians, much of Kentucky's healthcare history has been written at Jewish Hospital. A sampling of specialized services include: Louisville Institute for Heart and Lung Disease; The Louisville Institute for Hand and Microsurgery; Colonel Sanders Geriatric Center; Outpatient Care Center; Neuroscience Center; SKYCARE aeromedical services; Magnetic Resonance Imaging; Laser surgery; Inpatient acute dialysis; Hyperbaric oxygen medicine; Electron microsurgery; Plastics and Aesthetic Center; Oncology Center; Inpatient diabetes program; and more . . . .

KENTUCKY ARMY NATIONAL GUARD Booth #88
(Recruiting & Retention) Boone National Guard Center
Frankfort, Kentucky 40601-6168
(502)564-8519
KENTUCKY ARMY NATIONAL GUARD - As a physician in the Army Guard, you can broaden your medical experience. You'll start as an officer, enjoying all the privileges and prestige rank can bring. And you can attend professionally approved courses at no cost. Best of all, you'll be helping people in your state and local community.

KENTUCKY MEDICAL INSURANCE COMPANY
Booth #22
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205
(502)459-3400
Kentucky Medical Insurance Company, organized by the Kentucky Medical Association, is a professional liability insurance company owned by physicians, run by professionals, with physician input in all areas in which there is need of physician expertise. We welcome the opportunity to discuss the advantages and benefits represented by our program of coverage.

KENTUCKY MEDICAL MANAGEMENT & COMPUTER OPERATIONS, INC. **Booth #34**
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205
As the KMA's endorsed practice management and office automation company, KMCO strives to provide comprehensive services that provide solutions to the physician's business needs. KMCO uses "state of the art" equipment including IBM and Digital Equipment Corporation with one of the most detailed medical management and clinical packages on the market. This, coupled with extensive practice management support, insures increased productivity and a long term decrease in costs.

KMA INSURANCE AGENCY, INC. **Booth #21**
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205
(502)459-3400
KMA Insurance Agency, Inc., formed by the Kentucky Medical Association offers a variety of insurance products specifically designed for physicians, such as Office Protection, Workers Compensation, Homeowners, Automobile, Office Overhead, Life, Disability and other types of insurance. Stop by and see what we can do for you. We welcome your visit.

KNOLL PHARMACEUTICALS **Booth #56**
30 N. Jefferson Road
Whippany, NJ 07981
(201)887-8300
Please visit the Knoll Pharmaceuticals booth where information on Isoptin & Vicodin is available.

KENTUCKY TELCO FEDERAL CREDIT UNION
Booth #93
3740 Bardstown Rd.
Louisville, KY 40218
(502)459-3000
Continuing the tradition of meeting the special financial needs of physicians, Kentucky Telco Federal Credit Union has been serving its members since 1934 and offers a full range of financial services.

LEDERLE LABORATORIES **Booth #64**
1800 Valley Road
Wayne, NJ 07470
(201)831-7077
MAXZIDE™ TRIAMTERENE/HYDROCHLOROTHIAZIDE launched in 1984 by Lederle Laboratories, this product is a combination of two diuretics: hydrochlorothiazide and triamterene. It is used for the treatment of hypertension (high blood pressure) and for the treatment of edema. Two different compounds are used in MAXZIDE™ to maximize the effectiveness and safety of the product.

MARION LABORATORIES, INC. **Booth #84**
9300 Ward Parkway
Kansas City, MO 64114
(816)966-4000
We are proud to be in attendance again this year, and hope you will stop by and let your local representatives answer any questions you might have regarding any of our products. Featured will be CARDIZEM® (diltiazem HCl) our exciting calcium channel blocker, and CARAFATE® (sucralfate) unique, nonsystemic drug for the treatment of ulcers.

McKAY REED CO. **Booth #37**
620 S. 3rd Street
Louisville, KY 40202
Sales and service of Good Ol' John Hancock Companies.

McNEIL CONSUMER PRODUCTS COMPANY **Booth #86**

Camp Hill Road
Fort Washington, PA 19034
McNeil Consumer Products Company invites you to visit our exhibit featuring TYLENOL acetaminophen products, and other fine McNeil products. Extra-strength TYLENOL Caplets will be highlighted, together with other TYLENOL products, including Extra-strength TYLENOL Tablets and Junior Strength TYLENOL Caplets. Professional samples, information aids and patient education materials will be available, as a service to the health care profession. We encourage your attendance at our exhibit.

MEAD JOHNSON NUTRITIONAL DIVISION **Booth #54**

2404 Pennsylvania Avenue
Evansville, Indiana 47721-0001
(812)429-7779
We cordially invite you to visit the Mead Johnson Nutritional Division exhibit and meet our local representatives who welcome the opportunity to discuss products and services of interest to you. Featured will be Enfamil®, ProSobee®, and Sustacal®.

MEDISCUS PRODUCTS, INC. **Booth #89**

4235 Produce Road
Louisville, KY 40218
(502)964-1977
The Mediscus Air Support Therapy System is the result of nearly 15 years of research and clinical input from health care professionals worldwide. The primary applications of the System are the treatment and prevention of pressure sores and the management of intractable pain. This is accomplished with 21 waterproof, yet vapor permeable air sacs which support the patient on a temperature controlled environment which are pressure adjustable to maintain body surface pressure below capillary closure.

MERCK SHARP & DOHME **Booth #81**

West Point, PA 19486
(215)661-5631
Merck Sharp & Dohme cordially invites you to visit their exhibit featuring a number of products from their extensive line of pharmaceuticals. Representatives in attendance will be pleased to answer any questions you may have. Inquiries about our professional, informational, and educational services are welcomed.

MERRELL-DOW PHARMACEUTICALS **Booth #90**

1304 Ridge Rd.
Carmel, IN 46032
(317)848-9333
MERRELL-DOW PHARMACEUTICALS, manufacturers of Seldane, the first peripheral H1 specific blocker, and Lorelco, for the treatment of elevated serum cholesterol, welcomes you to the 126th Annual Meeting of the Kentucky Medical Association. We cordially invite you to stop by our booth at your leisure and hope that you enjoy your visit.

METHODIST EVANGELICAL HOSPITAL **Booth #33**

315 E. Broadway
Louisville, Kentucky 40202
(502)585-2241

MILES PHARMACEUTICALS **Booth #11**

400 Morgan Lane
West Haven, Connecticut 06516
(502)897-2033
MILES PHARMACEUTICALS will be providing information on MEZLIN (Mezlocillin Sodium), MYCELEX (Clotrimazole) products; Cream, Vaginal Cream, Vaginal Tablets, Solution, and Troches. ADALAT (Nifedipine) Capsules, The most widely prescribed nifedipine in the World. Representatives will be on hand to discuss Professional Services available. MILES PHARMACEUTICALS A CONTINUING FORCE IN THERAPEUTIC PROGRESS.

NATIONAL HEALTH LABORATORIES, INC. **Booth #2**

634 So. Floyd St.
Louisville, KY 40202
(502)585-5101
National Health Laboratories, Incorporated (NHL) offers complete clinical and anatomical laboratory services to the area physicians, hospitals, clinics, and other medical facilities. Locally, N.H.L. offers these services through multiple laboratory locations. Each laboratory is under the direction of a board certified pathologist. N.H.L.'s booth will highlight its capabilities in the areas of rapid electronic test result delivery, state of the art technology and reliable local service.

NORTON PSYCHIATRIC CLINIC **Booth #73**

P.O. Box 35070
Louisville, KY 40232
(502)562-8850
The Norton Psychiatric Clinic provides comprehensive psychiatric care in a medical setting. The 36-bed inpatient unit offers innovative treatment by a team of mental health professionals as well as the full medical resources of the Norton and Kosair Childrens Hospital. The staff is experienced in managing a broad range of problems, including the patient who has both psychiatric and medical disorders.

OFFICE MANAGEMENT SYSTEMS **Booth #91**

1030 Burlew Blvd.
Owensboro, KY 42301
(502)926-1035
OFFICE MANAGEMENT SYSTEMS, INC. is a Value-Added-Reseller (VAR) for AT&T Information Systems. We sell their entire line of computer systems. Along with this, we market a state-of-the-art medical software

package written by Clinical Data Design out of Milwaukee, Wisconsin. This package was written to run under the UNIX operating system developed by Bell Laboratories. It is modularly driven and contains financial reporting, appointment scheduling, electronic chairs, free-form database for medical records, and much more.

OLYMPUS CORP. **Booth #76**
1805 Crossgate Lane
Louisville, KY 40222
(502)426-9370
We will be showing all the new generation fiberscopes. The upper GI scopes, the Colonscopes, Bronchoscopes will be at the booth. The Olympus Flexible Sigmoidoscope for the office, both the 35 CM and 60CM will be at the booth. Olympus Endoscopes are the worlds best known brand—"Progress Through Precision," is our motto! Please stop at the booth and say "HI"!

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Raritan, NJ 08869
(201)524-2343
Ortho Pharmaceutical Corporation will present the most complete line of medically accepted products for the control of conception. The ORTHO-NOVUM* brands, which are the country's most frequently prescribed oral contraceptives, will be on display. The first tri-phasic oral contraceptive, ORTHO-NOVUM 7/7/7, will be featured. Also featured will be a wide variety of educational aids and gynecological therapeutic products.

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2020 Newburg Rd.
Louisville, KY 40205
(502)451-3330
One of the largest, freestanding psychiatric hospitals in the country, Our Lady of Peace Hospital offers specialized programs for children, adolescents, adults, and substance abuse. Twenty-four admission and physician referral are available.

PARKE-DAVIS **Booth #71**
201 Tabor Road
Morris Plains, New Jersey 07950
(201)540-3182
We invite you to visit the Parke-Davis booth where our Sales Representatives welcome the opportunity to discuss and assist you regarding Parke-Davis products. We hope you will join us.

PFIZER LABORATORIES **Booth #67**
7513 Briarwood Dr.
Crestwood, KY 40014
(502)241-1082

PHYSICIANS HEALTH PLAN OF KENTUCKY **Booth #29**
7410 LaGrange Road
Louisville, KY 40222
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PHYSIO-CONTROL CORPORATION **Booth #6**
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Princeton Pharmaceutical Products is organized to deliver quality products in cardiovascular and other fields, and to provide in-depth information to the medical profession by utilizing new technologies to access the information in the most time efficient methods available. Our therapeutic specialization is now primarily in the cardiovascular area.

PROFESSIONAL MANAGEMENT SERVICE **Booth #49**
401 East McMillan
Cincinnati, Ohio 45206
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625 Cleveland Ave.
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(614)227-3571
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Kenilworth, NJ 07033
(201)558-4000

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B'ham, AL 35219
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Southern Medical Association will have information available on the advantages of membership, such as Dial Access, Video Access, Regional Postgraduate Conferences, Seminars, the Annual Scientific Assembly, and the SOUTHERN MEDICAL JOURNAL. Also, material will be available on other benefits to members: the IRA, Retirement and Insurance Programs, Universal Life, Research Project Fund, Loan and Scholarships, Hyatt Hotels Corporate Rate, the gold MasterCard, and the Physicians' Purchasing Program.

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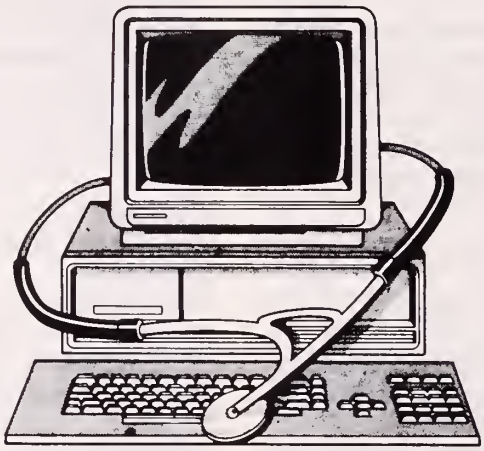

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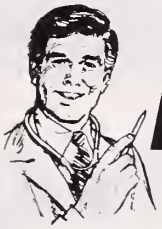

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Health and Safety Tip From
the American Medical Association

MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.

2. Drinking to handle problems or relieve symptoms.

3. Obvious preoccupation with alcohol and the frequent need to have a drink.

4. Surreptitious drinking or gulping of drinks.

5. Tendency toward making alibis and weak excuses for drinking.

6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.

7. Frequent absenteeism from the job, especially following weekends and holidays.

8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.

9. Shabby appearance. poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.

10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.

11. Multiple contacts with the health care system with disorders that are alcohol caused or related.

12. Persistent marital and family problems, perhaps with multiple marriages.

13. History of arrests for drunkenness or drunken driving.

Submitted by the KMA Impaired Physicians' Committee

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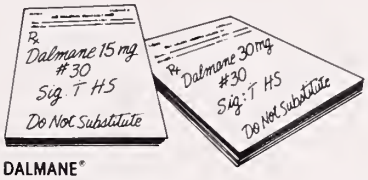
References: **1.** Kales J, *et al: Clin Pharmacol Ther 12* 691-697, Jul-Aug 1971. **2.** Koles A, *et al: Clin Pharmacol Ther 18*:356-363, Sep 1975. **3.** Koles A, *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **4.** Koles A, *et al: Clin Pharmacol Ther 32*:781-788, Dec 1982. **5.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **6.** Dement WC, *et al: Behav Med*, pp. 25-31, Oct 1978. **7.** Kales A, Koles JD: *J Clin Psychopharmacol 3*:140-150, Apr 1983. **8.** Tennont FS, *et al:* Symposium on the Treatment of Sleep Disorders, Teleconference, Oct 16, 1984. **9.** Greenblott DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977.



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Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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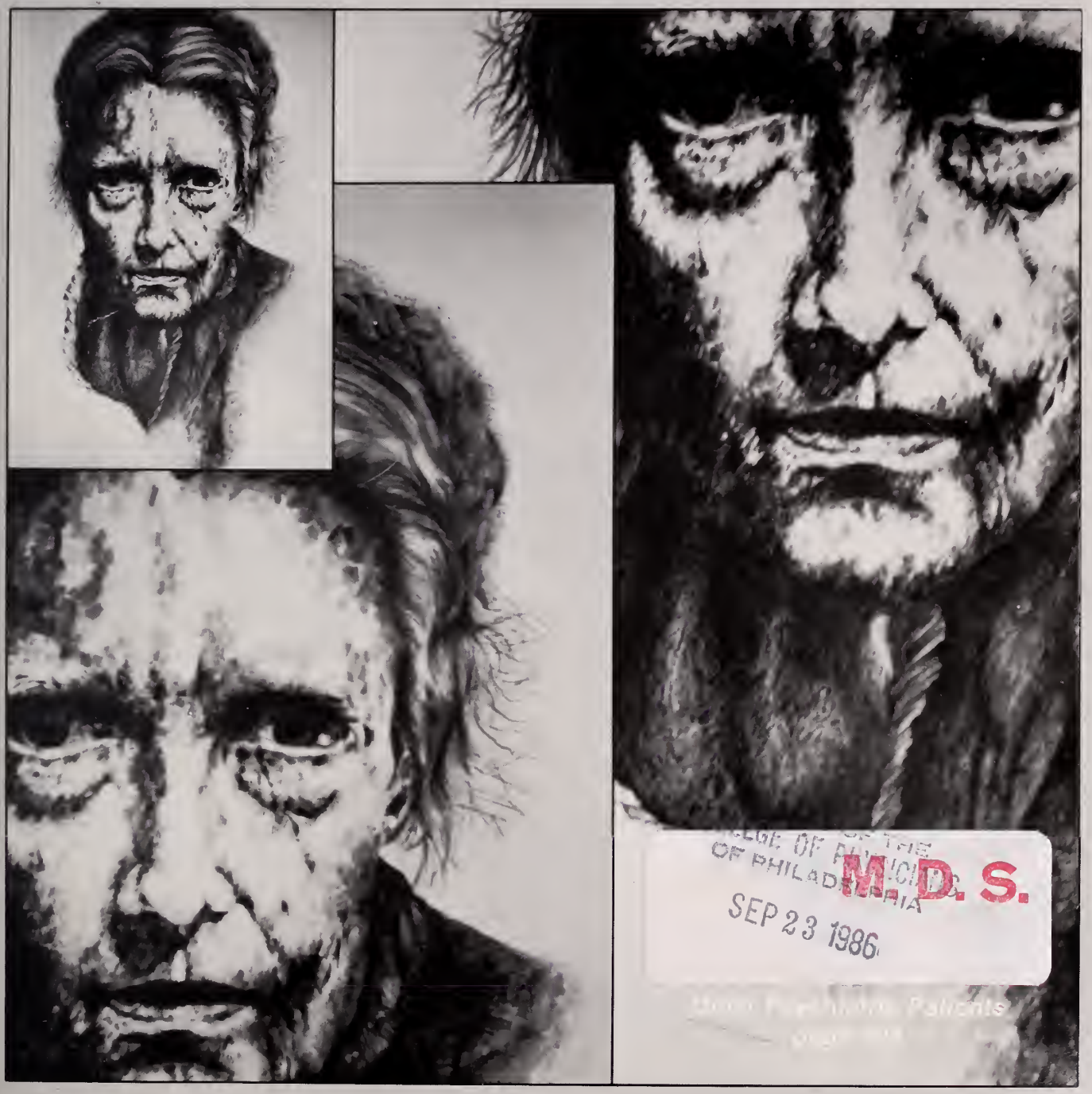

COLLEGE OF PHYSICIANS OF PHILADELPHIA
SEP 23 1986
M. D. S.

Volume 84, Number 9

September 1986

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JOURNAL OF THE

Kentucky Medical

ASSOCIATION

Volume 84, Number 9 September 1986

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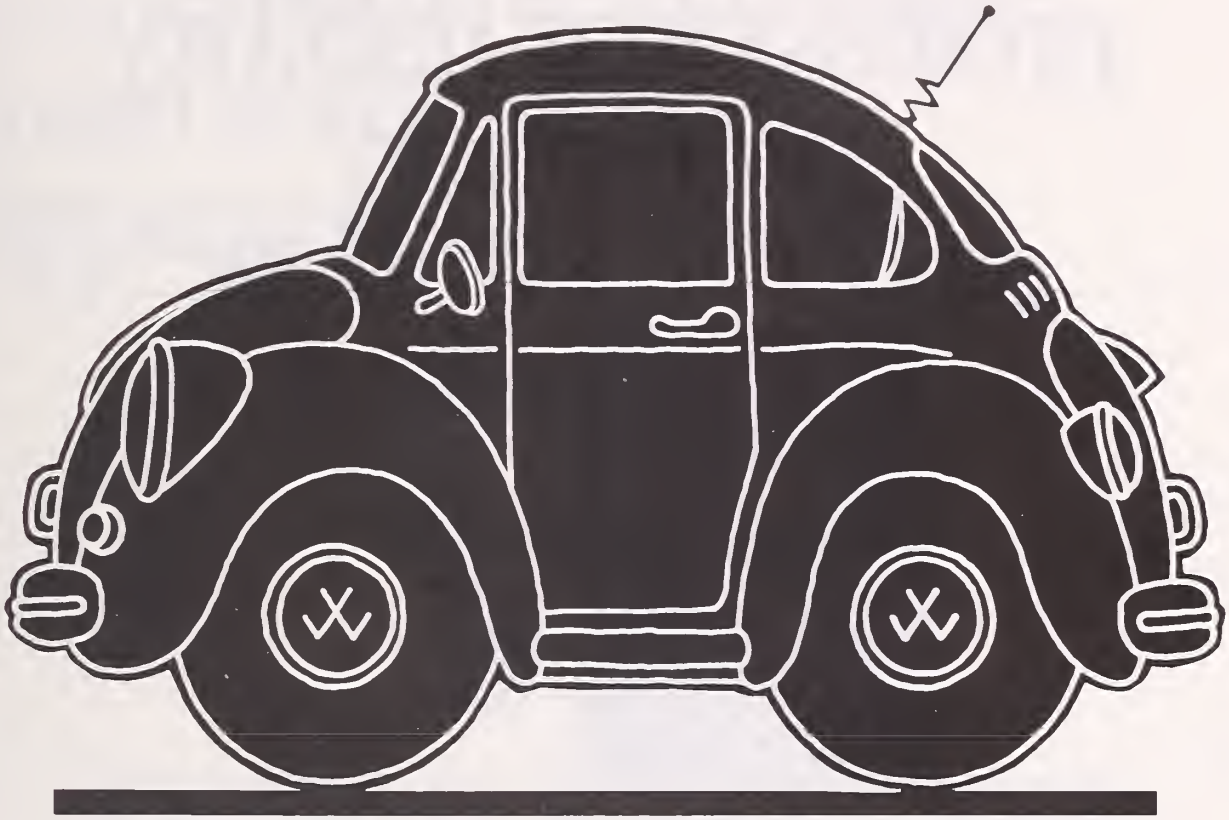

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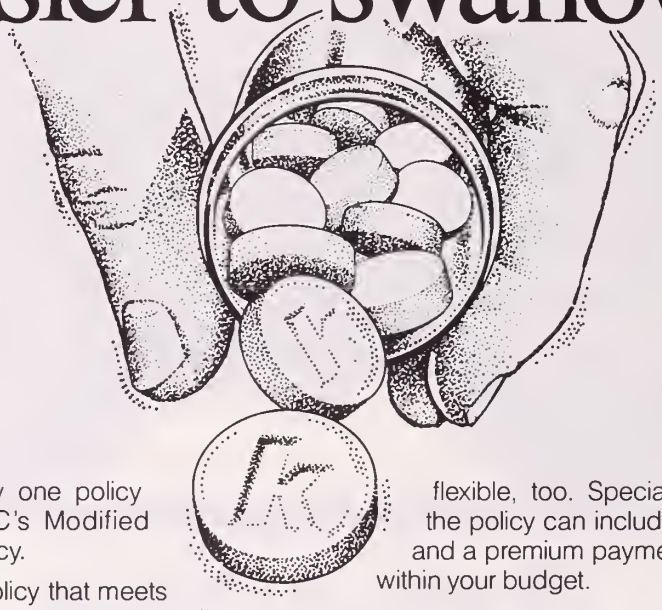

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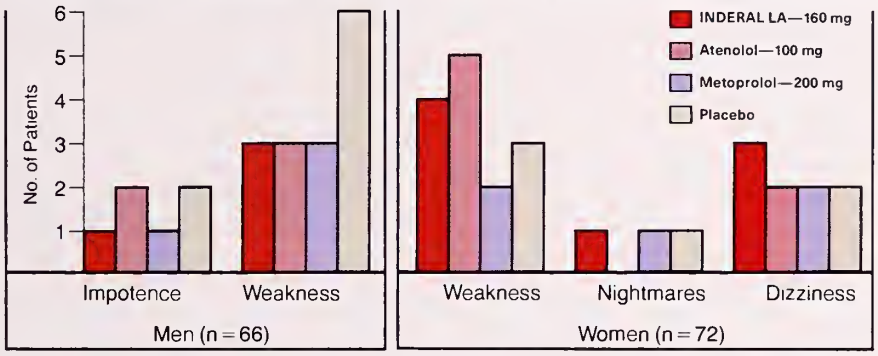

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CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible)

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications

THYROTOXICOSIS Beta blockade may mask certain clinical signs of hyperthyroidism Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm Propranolol does not distort thyroid function tests

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors

DIABETES AND HYPOGLYCEMIA Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease In patients with renal disease, thiazides may precipitate azotemia In patients with impaired renal function, cumulative effects of the drug may develop

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma

Thiazides may add to or potentiate the action of other antihypertensive drugs Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL Propranolol should be used with caution in patients with impaired hepatic or renal function Propranolol is not indicated for the treatment of hypertensive emergencies

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase

DRUG INTERACTIONS Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity There were no drug-related tumorigenic effects at any of the dosage levels Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug

PREGNANCY Pregnancy Category C Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS Propranolol is excreted in human milk Caution should be exercised when propranolol is administered to a nursing mother

PEDIATRIC USE Safety and effectiveness in children have not been established

Hydrochlorothiazide: GENERAL Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely Hyponatremia, hypochloremic alkalosis, and hypokalemia Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids Medication such as digitalis may also influence serum electrolytes Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH

Interference with adequate oral electrolyte intake will also contribute to hypokalemia Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability) Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease) Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening In actual salt depletion, appropriate replacement is the therapy of choice

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy

Insulin requirements in diabetic patients may be increased, decreased, or unchanged Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy

Thiazides may decrease serum PBI levels without signs of thyroid disturbance

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use

PREGNANCY Pregnancy Category C Thiazides cross the placental barrier and appear in cord blood The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult

NURSING MOTHERS. Thiazides appear in human milk If use of the drug is deemed essential, the patient should stop nursing

PEDIATRIC USE Safety and effectiveness in children have not been established

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy

Cardiovascular Bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type

Central Nervous System. Lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability: slightly clouded sensorium, and decreased performance on neuropsychometrics

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis, ischemic colitis

Allergic: Pharyngitis and agranulocytosis, erythematous rash; fever combined with aching and sore throat, laryngospasm and respiratory distress

Respiratory. Bronchospasm.

Hematologic Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported

Miscellaneous. Alopecia; LE-like reactions; psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol

Hydrochlorothiazide:

Gastrointestinal: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis, sialadenitis

Central Nervous System Dizziness, vertigo, paresthesias; headache; xanthopsia

Hematologic Leukopenia; agranulocytosis, thrombocytopenia aplastic anemia

Cardiovascular Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics)

Hypersensitivity Purpura, photosensitivity, rash; urticaria, necrotizing angiitis (vasculitis, cutaneous vasculitis), fever, respiratory distress, including pneumonitis; anaphylactic reactions

Other Hyperglycemia, glycosuria; hyperuricemia, muscle spasm, weakness, restlessness, transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn

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REFERENCE:

1. Ravid M, Lang R, Jutrin I: The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily *Arch Intern Med* 1985,145 1321–1323

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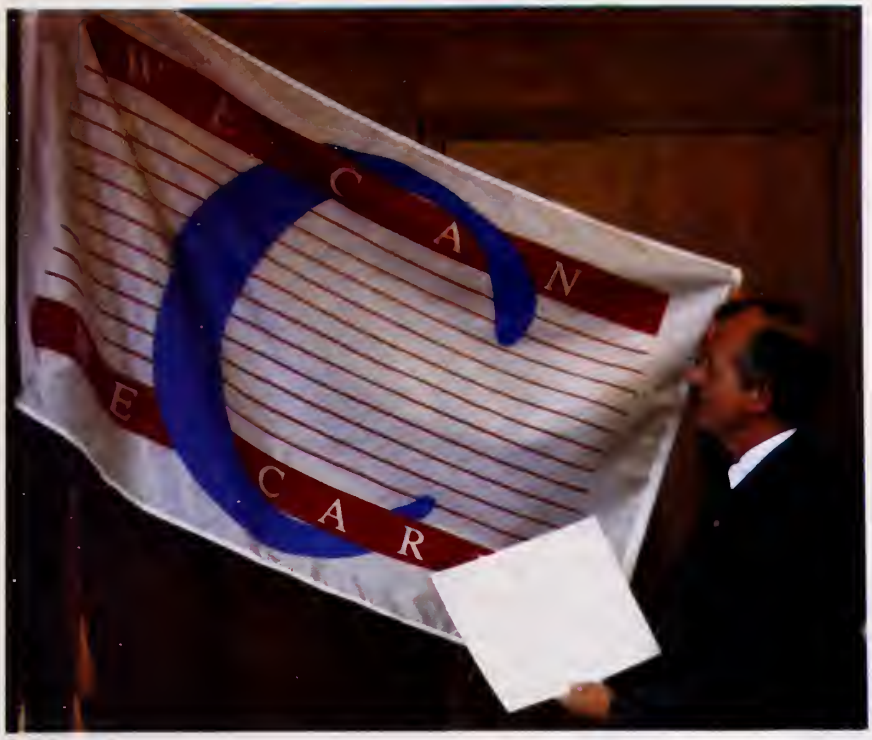


Accolades To You!

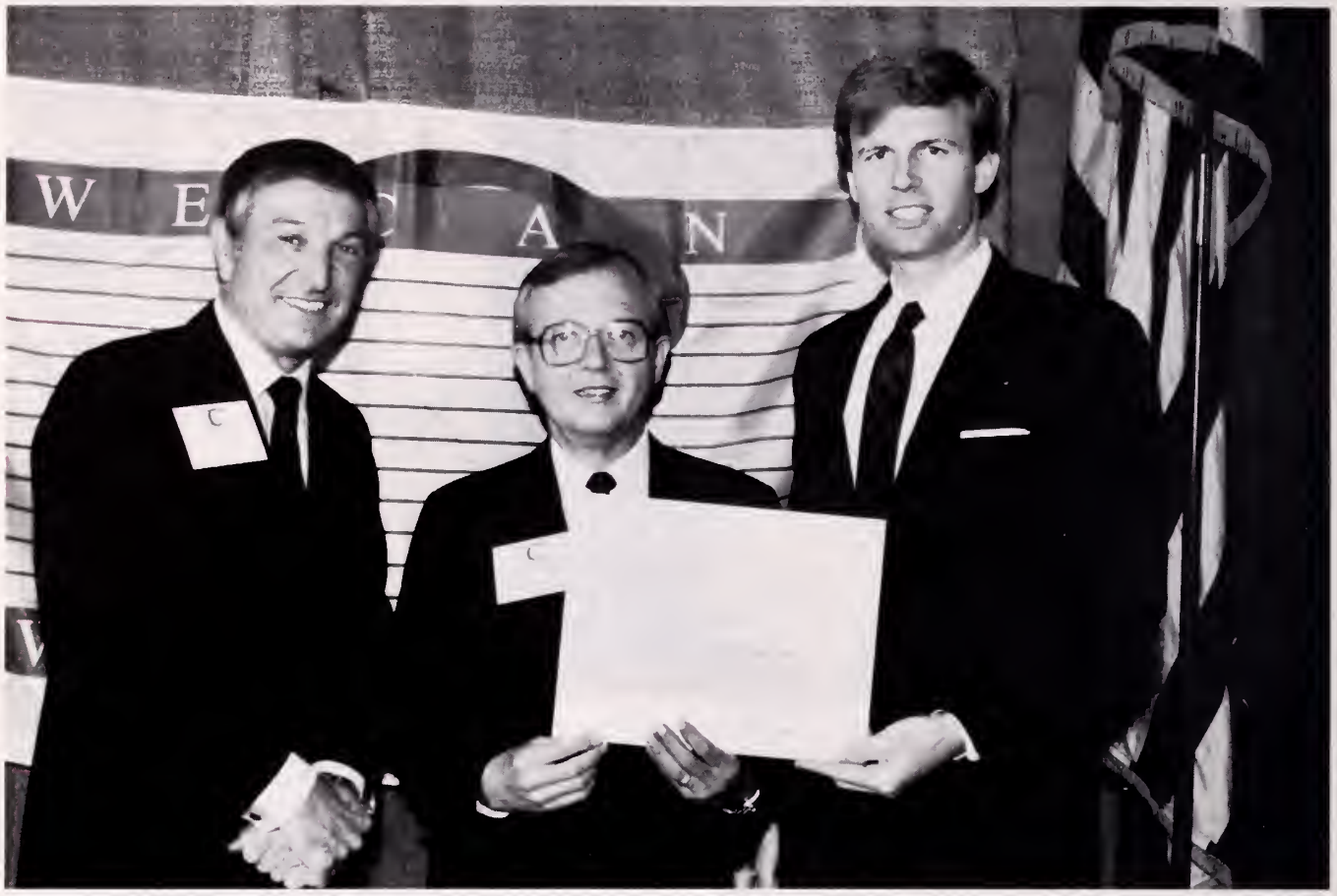
In Washington, D.C., on the 17th and 18th of June, I had the privilege of representing KMA and the physicians of this state involved with **Kentucky Physicians Care.** The occasion was a recognition by the President's Citation Program for Private Sector Initiatives. This was the second year for the President's Citation Program established in 1984 to recognize and encourage public service by businesses, trade associations, and professional societies to enrich the lives of people in their communities. Since 1984, more than 3,000 organizations have qualified through outstanding private sector initiative programs to display the program's symbol — a red, white, and blue "C-Flag" — which bears the motto, "We Can," "We Care."

An awards committee composed of leaders in business and associations selects 100 participants each year whose programs best demonstrate the truly American spirit of volunteerism and community action. This year's winning organizations implemented projects ranging from drug abuse education and increased public awareness of missing children to community economic revitalization and job training.

At the suggestion of Brereton Jones, and with the tremendous effort and dedication of Russell Travis, M.D. of Lexington, the KMA House of Delegates in 1984 voted to start the Kentucky Physicians Care program. This was done to ensure equal access to needed medical care regardless of the ability to pay. Since the program began in January 1985 more than 9,200 patients have been provided free care by about 2,200 Kentucky physicians. The program was continued by the 1985 House of Delegates.

Early this year at the encouragement of the American Society of Association Executives, KMA applied for the award and received a "C-FLAG" and was chosen from more than 1500 organizations to receive one of 70 citations. At a reception on the 17th of June, all 70 citation winners were present as well as the 30 award winners. The following day KMA was presented the citation at the U.S. Chamber of Commerce. The Award winners were presented at the White House Rose Garden ceremony which was quite impressive.

Both President Reagan and Vice-President Bush were present at the ceremony and congratulated all the winners. It was pointed out that in 1985 all



Left to right: R. William Taylor, President, American Society of Association Executives; Wally O. Montgomery, M.D., KMA President; and Frederick J. Ryan, Director, White House Office of Private Sector Initiatives.

charitable giving in this country totaled $79.84 billion which was a $6.5 billion increase over 1984 and an increase of 82% between 1980-85. It is difficult to determine the dollar value Kentucky physicians have given to the Kentucky Physician Care program, but I am sure that the estimated amount is only a small percentage of the amount of free medical care donated. For this dedication I salute you and thank you and want you to each proudly share in this honor.

In addition to medical care there are many other activities by the Kentucky medical family which deserve commendation. The auxiliary's dedication to AMA-ERF has always been a constant source of pride when the amounts they have collected for medical education are reported and the checks presented to the Deans of our two medical schools. Also, the two Ronald McDonald houses in Kentucky at Lexington and Louisville are the results of dedication to the cause by physician families.

As you look around you can find many other examples. Be sure to encourage those efforts by your fellow physicians and their families and to express your "thanks." And take advantage to seize on opportunities to help out your fellow man.

I am very proud of KMA, the staff which works so hard to assure its smooth operation, and every member and spouse who typify what is great about this profession, this state, and this nation where God has so richly blessed us all.

Wally O. Montgomery, M.D.
KMA President

An Inpatient Diagnostic Survey of Older Psychiatric Patients

MANOOCHEHR S. MANSHADI, M.D., JAMES SCHUSTER, M.D., STEVEN LIPPMANN, M.D., JAMES ROGERS, PH.D., WALLY PAST, M.D., DAVID MEYER, B.S.

A retrospective three-year survey of older psychiatric inpatients recorded the most prevalent diagnosis to be among the affective disorders.* Depression was the most frequent finding. Dementia, delirium and schizophrenia were other common diagnoses, and many patients had more than one illness which complicates assessment. Mental illness was frequently reported in family histories. The majority of patients had concurrent medical problems or behavioral difficulties, often as the immediate cause of hospitalization.

**Affective disorder: includes the entire spectrum of mood disturbances.*

By the year 2000, over 15% of Americans will be over age 65. During the first 3/4 of this century that segment of our population tripled, a 7-8 fold growth in absolute numbers (Aging and Medical Education, 1978). This demographic shift is expected to continue with a dramatic rise in the percentage of older people. Such change exposes a dearth of knowledge about health and disease affecting the elderly, and opens questions regarding psychopathology assessment procedures in older persons, so important since good evaluations are essential for therapeutic efficiency.

Differential diagnosis within this group is complicated by presentations that are sometimes atypical compared to younger populations; especially difficult is the differential between dementia, delirium and depression (Lippmann, 1985; Reifler, 1982). Dementia is the most common mental illness of old age (Wells, 1977 & 1982). Severe cases involve 9% of elderly people and milder forms may occur in up to 15% of the remainder (Wells, 1977 & 1982). Etiologically, 15% of demented patients have medical ailments which are potentially curable and up to one-fourth of the rest have disorders in which treatment improves prognosis (Wells, 1977 & 1982). Delirium is a frequent condition, also of diverse etiologies, and one not consistently recognized nor properly treated (Lipowski, 1983; Wells, 1980). Depression, too, is common (Lippmann, 1983). Despite the elderly comprising only 11% of the population, suicide rates approach 17%. Depression is enhanced by the frequency of grief, loss, chronic medical diseases or pain, and diminished physical, financial or social status. Bipolar disorder and schizophrenia also affect persons in this age group.

Methods

This is a retrospective chart review of 195 consecutive Louisville General Hospital psychiatry admissions over age 50, from June 1979 through June 1982. Eval-

TABLE 1

DEMOGRAPHIC CHARACTERISTICS IN AN OLDER PSYCHIATRIC POPULATION

	AGE 50-65 (n=138)	>65 (n=57)	All (n=195)
Age:			
Mean			61.5
Standard deviation			9.3
Sex:			
Male	50	22	72
Female	88	35	123
Race:			
Black	29	13	42*
White	108	44	152
Marital Status:			
Single	21	4	25†
Married	44	23	67
Other	37	22	59

*in one case, race was not clear
†in 44 cases, marital status was not clear

TABLE 2

CROSSCLASSIFICATION OF OLDER PSYCHIATRIC POPULATION ON AGE, RACE AND SEX

	AGE 50-65	≥65
White:		
Male	38 (27.7%)	16 (28.1%)
Female	70 (51.1%)	28 (49.1%)
Black:		
Male	12 (08.8%)	6 (10.5%)
Female	17 (12.4%)	7 (12.3%)
Total	137 [70.6%]	57 [29.4%] N=194

Note: racial status unavailable for one female. Percentages in parentheses are based on total patients per age category. Percents in brackets are based on total patients (N=194).

uations of the complaints or problems, assessments and diagnosis are studied. Acutely distressed patients were hospitalized with agitation, psychosis, depression, overdose, cognitive deficit, or for emotional disturbance associated with medical ailments or their treatments. Many patients were economically disadvantaged. Our unit is an acute care, university-teaching service in the county hospital of a metropolitan area.

In each case, a history and physical examination was performed. Appropriate diagnostic studies, psychological testing and consultations were solicited. Hospital records of every subject were reviewed for multiple items (Tables 1-4). The collected data included demographic, clinical, social, laboratory and diagnostic evaluations. Diagnostic categories, in order of incidence and defined according to DSM III were: affective disorders, depression, dementia, schizophrenia, bipolar disorder, delirium, schizoaffective illness and "other." Diagnoses were made by psychiatry residents, reporting to a faculty psychiatrist, based on information from a routine clinical setting, with assistance from a team of nurses, social workers, a clinical psychologist, an expressive therapist and medical students.

Results

Data from the 195 admissions revealed the patient's demographic and clinical status, family history, assessment details and diagnoses (Tables 1-4). There were 123 females and 72 males; the age range was 50 to 93 years ($\bar{x}$ = 61.5). There were 138 patients between ages 50 and 65, with 57 over 65, and 15 over 75. The ratio of white to black patients, at 3.6:1, is lower than the 6:1 ratio in this community (U.S. Census, 1980). Approximately 44% of the subjects were married.

The most common final diagnosis, at 39% (77 patients), was illness in the affective disorders range. Depression was found in 62 cases. Bipolar disorder was recorded in 15 subjects with nine being hypomanic and six depressed. Dementia was documented in 31% of admissions (60 instances); the three major pathophysiologies were neurologic (26 cases), toxic (12 cases) and metabolic (seven cases). The neurologic illnesses were primarily ailments of the Alzheimer's disease type, yet multinfarct-dementia and normal pressure hydrocephalus, *etc* were also discovered. Chronic alcohol abuse sequelae were the most common finding among the toxic group. Metabolic disturbances, such as hypothyroidism and deficiencies of folate of B_{12}, caused seven dementias, with imbalances in fluid or electrolytes often worsening clinical features. The other 25% of dementia cases had an unclassified etiology. There were two pseudodementias (*ie*, depression which simulated dementia). Schizophrenia occurred in 9.7% of patients (19 people); an additional 4.6% were classified schizoaffective. Delirium was observed in 8% of admissions (15 subjects).

Concurrent medical problems occurred in 79% of patients. Cardiovascular or cerebrovascular disease, diabetes mellitus and imbalance of fluid or electrolytes were frequent examples. Arthritides and more rarely, neoplasia, were also observed. Behavioral difficulties accounted for 72% of admissions and varied from aggression to withdrawal. Significant psychiatric disorder histories within the family were obtained from 37% of participants.

The initial impressions of the admitting physicians were usually accurate. Patients presenting with symp-

TABLE 3

INCIDENCE OF PRESENTING PROBLEMS IN AN OLDER PSYCHIATRIC POPULATION

	AGE 50-65 (n=138)	>65 (n=57)	All (n=195)
Dementia	13 (09.4%)	17 (29.8%)	30 (15.4%)
Depression	32 (23.2%)	7 (12.3%)	39 (20.0%)
Drug Abuse	13 (09.4%)	3 (05.3%)	16 (08.2%)
Suicidal Tendencies	24 (17.4%)	6 (10.5%)	30 (15.4%0
Psychosis	48 (34.8%)	19 (33.3%)	67 (34.4%)
Affective Disorders	10 (07.2%)	6 (10.5%)	16 (08.2%)
Other	33 (23.9%)	17 (29.8%)	50 (25.6%)

percentages in parenthesis are based on total patients per age category. (138, 57, or 195)

TABLE 4

INCIDENCE OF DIAGNOSTIC CATEGORIES IN AN OLDER PSYCHIATRIC POPULATION

	AGE 50-65 (n=138)	65 (n=57)	All (n=195)
Affective Disorders			
Range:	59 (42.7%)	18 (31.6%)	77 (39.4%)
Manic	7	2	9
Depressive	48	14	62
Bipolar	11	4	15
Dementia:	33 (23.9%)	27 (47.4%)	60 (30.8%)
Metabolic	5	2	7
Toxic	10	2	12
Neurological	11	15	26
Infections	0	0	0
Other	7	8	15
Pseudodementia	2 (01.4%)	0 (00.0%)	2 (01.1%)
Schizophrenia	17 (12.3%)	2 (03.5%)	19 (09.7%)
Delirium	8 (05.8%)	7 (12.3%)	15 (07.7%)
Schizoaffective	7 (05.1%)	2 (03.5%)	9 (04.6%)
Other Psychiatric Illness	55 (39.9%)	10 (17.5%)	65 (33.3%)
No Psychiatric Illness	0 (00.0%)	0 (00.0%)	0 (00.0%)

percents are based on total patients per age category and may add up to greater than 100% as some patients had two or more diagnoses.

toms of dementia received that final diagnosis 100% of the time. Considering 39 patients presenting initially as depressed, 84.6% received depression as the final diagnosis, 17.9% were diagnosed as demented, 5.1% as delirious and 30.8% had miscellaneous other conditions (percentages exceed 100%, as some subjects received more than one diagnosis). Of 67 patients, psychotic on admission, the diagnoses were: 37% as demented, 23% had affective disorders with 11% classified as major depression with psychotic features, 22% were schizophrenic or schizoaffective, 4.5% were delirious and the remainder had other psychiatric illnesses. Among 30 people with suicidal tendencies, 63% were depressed, 13% were demented, 7% were delirious and 33% received miscellaneous classification.

Discussion

Epidemiology in geropsychiatry is a developing field. This survey reviews inpatients over age 50 in a general hospital psychiatry unit. The frequency of medical illness was 79%. Our clinical service tends to select cases requiring medical attention; nevertheless, the documented prevalence illustrates the need for quality medical care in psychiatry for older people. Stressing somatic attention, for example, aides in the differentiation of such conditions as thyroid disease from affective disturbance and dementia from delirium or depression. We stress a holistic approach incorporating both medical and psychiatric expertise. The fact that one out of five of the suicidal patients was organically encephalopathic rather than depressed highlights this point.

An inpatient geropsychiatric survey in Massachusetts indicated that medical conditions caused mental disturbance in one-fourth of their population, with previously unrecognized ailments found in over 20% of patients (Weingarten, 1982). Half of them had mental symptoms due to adverse reactions to drugs given for non-psychiatric diseases. Such presentations can be due to preexistent psychiatric dysfunction worsened by physical conditions or mental aberration caused by medical factors. Somatic illness and their treatments are frequent in older as compared to younger persons; unwanted drug side-effects are seven times more prevalent in the elderly, with 95% of all people over age 65 regularly taking medications (Lippmann, 1983).

Our most common psychiatric diagnosis, at 39%, was affective disorder. This finding was expected since up to 25% of the aged population suffer from depression (Lippmann, 1983). The inpatient Massachusetts study also reported a 39% rate of affective disorders, with depression specifically at 30% (Weingarten, 1982). A Seattle outpatient study of 2300 patients, whose age averaged 75, observed depression in 13% (Reifler, 1982). Discrepancies between these rates of depression may exist because many depressed people are not hospitalized unless severely ill. For example, only 1% of the Seattle patients had sought psychiatric care, though many took medications for "nerves." The differential diagnosis in depression also is sometimes confused by somatizations, psychosis and dementia, and outpatients

often receive more superficial assessments and are usually less severely affected than inpatients. This investigation confirms the importance of considering depression in the evaluation of older persons.

Dementia, which accounted for 31% of our diagnoses, is widespread among elderly people, afflicting 40% of those over age 65 (Lippmann, 1985; Wells, 1977 & 1982). The Massachusetts report documented a 39% dementia rate; our lower figure may reflect our younger age grouping (Weingarten, 1982). The Seattle investigation discovered dementia in 21% of their outpatients and probably represents a population less ill than was studied (Reifler, 1982). A thorough dementia work-up, seeking the causative pathology, is always expected (Lippmann, 1985; Wells, 1977, 1980 and 1982).

Schizophrenia was found in 9.7% of our patients while a 14% rate was noted in the Massachusetts study (Weingarten, 1982). Both rates are higher than the 1% general population prevalence for schizophrenia. This increased rate presumably reflects a selected sample of hospitalized psychiatric patients.

Delirium was a common admission diagnosis. Delirium was associated with a wide variety of etiologies and presentations (Lipowski, 1983; Wells, 1980). Obviously, psychotic or bizarrely behaving patients are not always schizophrenic or in drug withdrawal, some were also suicidal, demented or depressed. A thorough differential diagnostic evaluation in all delirium cases is mandatory. The treatment objective is to cure the underlying illness rather than to provide symptom relief.

At 37%, our high rate for family history of psychiatric disease is a product of the frequency of affective disorders and schizophrenia. Even this rate may be understated due to patient reluctance to reveal information, and yet it underlines potential genetic and/or socio-familial predispositions. Behavioral difficulties were found in 72% of our admissions, with hospitalization precipitated by serious social dysfunction. Many cases had limited insight into their ailment and received assistance often only after being cajoled by family or by being police-escorted to the hospital.

The initial impressions frequently were the same as on discharge. The diagnostic accuracy of admitted psychiatry residents was gratifying. Precision of assessment is especially appreciated in a county teaching hospital where conditions are rushed and many admissions occur late at night, by a rotating group of 30-40 residents. Many patients had more than one illness; for example, among drug abusers, depression was noted in 50% and dementia in 31% of cases. Multiple illnesses and their therapies complicated diagnosis and treatment and reaffirm the need for accurate assessments in the therapeutic regimen. Aided by good assessment, proper treatment of mental disorders in the aged has positive impact on our society.

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AIDS In Kentucky

ROBERT L. FRIERSON, M.D. AND STEVEN LIPPMANN, M.D.

The Acquired Immune Deficiency Syndrome (AIDS) is a fatal illness that has claimed 47 victims in Kentucky, 32 of whom are dead. Fifteen AIDS patients were evaluated over a five-year period. Medical conditions included pneumocystis carinii pneumonia, disseminated Kaposi sarcoma, cerebral toxoplasmosis, and non-Hodgkins lymphoma. Psychological stressors comprise social isolation, loss of control, and anticipatory grief. Emotional responses to AIDS included depression, panic, homicidal thoughts, and attempted suicide. Aims for the physician are management of recurrent opportunistic infections, co-ordination of the activities of consultants from other specialties, and mobilization of community resources. In Kentucky, such agencies as Hospice and Visiting Nurses Associations, comprehensive care centers, AIDS shelters, and crisis hotlines are important in the overall management of AIDS sufferers.

The Acquired Immune Deficiency Syndrome (AIDS) is a major health concern of epidemic proportions.[1,2] The syndrome, first described in this country in 1979, results from inhibition of cell mediated immunity by suppression of helper t-cell activity.[3-5] Even before the human t-cell lymphotrophic virus (HTLVIII) was identified as the causative agent in 1983, several cases of AIDS had been reported.[6-8] A less severe constellation of symptoms, the AIDS-related complex (ARC), is also documented.[7] It is estimated that for every patient with AIDS, there are 100 others with ARC and perhaps 50 persons who have no symptoms, but are nonetheless capable of transmitting infection (*i.e.*, carriers).[9,10] HTLVIII transmission occurs by means of tainted blood products, sexual activity involving exchange of body fluids, and parenteral drug use with contaminated needles.[10-15] Intrauterine transmission to the fetus is also reported.[16-18] Although the virus has been isolated from tears and saliva, neither source is implicated in transmission of this disease.[19-21] Health care personnel, household contacts, and classmates of AIDS patients are not at significant risk of infection.[22-25] HTLVIII, extremely resilient in the bloodstream, is readily destroyed by common disinfectants and prolonged exposure to the atmosphere.[5,26] Among sexual practices, anal intercourse, with the possibility of mucosal tears, carries the greatest risk.[27] The incubation period, from initial exposure to the virus until the first appearance of clinical signs, may be very long, perhaps decades.[5] During this time, the virus lies dormant until the right factors (as yet unknown) trigger the immune deficiency.[5]

In the United States, the current high risk groups are sexually active homosexual and bisexual males, intravenous drug users regardless of sexual preference, and individuals who have received blood products or transfusions.[3,5,7,28] The disease has also been observed in intimate heterosexual contacts of persons with AIDS, and children born to HTLVIII infected mothers.[7,16-18] Infants conceived by artificial insemination with contaminated semen have also contracted the disease.[16]

In this country, the male to female ratio of AIDS sufferers is 14:1, with 53% of female victims having a history of intravenous drug use and needle sharing.[7,9] Over 70% of homosexuals with AIDS are white; however, 80% of heterosexual drug abusers with AIDS are nonwhite (blacks 50%; Hispanics 30%).[7] Fifty six percent of sufferers under the age of 13 are black.[9] AIDS is more common in metropolitan areas.[9] This syndrome kills more men age 40-44 in New York City than coronary artery disease.[29] It is also the leading cause of death among males age 30-44 and females age 25-29 in that city.[29] Sixty percent of AIDS victims live in New York and California.[30]

Attempts to protect the nation's blood supply led to the development of tests to detect the presence of HTLVIII antibodies. The enzyme-linked immunosorbent assay (ELISA) and more specific Western Blot tests have been useful in screening military recruits and donors of blood and semen.[7] A positive antibody test indicates exposure to the virus, not necessarily active infection.[5] Typically, AIDS patients suffer from such conditions as Pneumocystis carinii pneumonia and Kaposi sarcoma; however, they are susceptible to opportunistic infections given their immune compromised state.[14,31-37] Antiviral agents under investigation for AIDS treatment include Suramin, Ribavirin, Alpha Interferon, Phosphonoformate, and an experimental drug

FIGURE ONE NATIONAL AIDS OCCURRENCE RATES

20,531 cases of Acquired Immune Deficiency Syndrome in the United States as of May, 12, 1986.

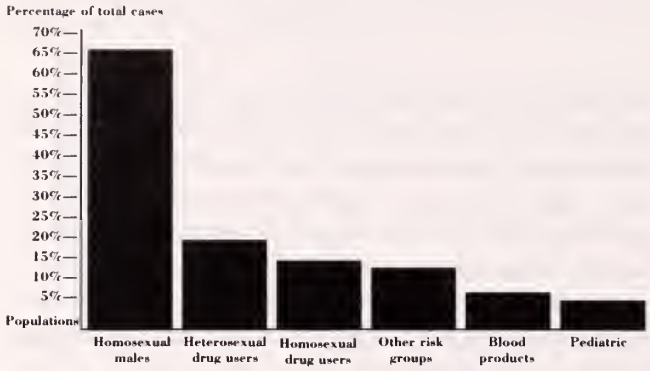
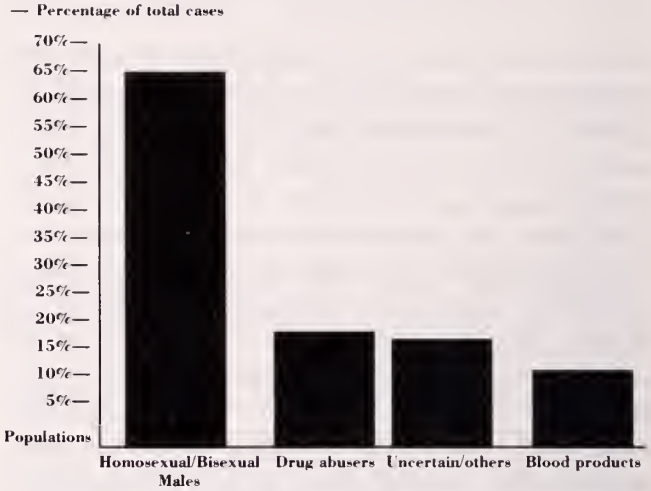


FIGURE TWO KENTUCKY AIDS OCCURRENCE RATES

47 cases of Acquired Immune Deficiency Syndrome in Kentucky as of May 15, 1986.*



***There have been no reported pediatric cases of AIDS in Kentucky.**

used primarily in France, HPA-23.[9] Immune stimulators under study include Interleukin-2, Gamma Interferon, Isoprinosine, and Thymopectin.[9] Bone marrow transplants, even from identical twins, have failed to reverse the immune deficit.[9] There is no prophylactic treatment for those individuals exposed, but not yet ill. There is no definitive treatment once AIDS is diagnosed.[38] A vaccine against HTLVIII infection does not exist. Fifty-three percent of the 23,000 AIDS sufferers have died.[30]

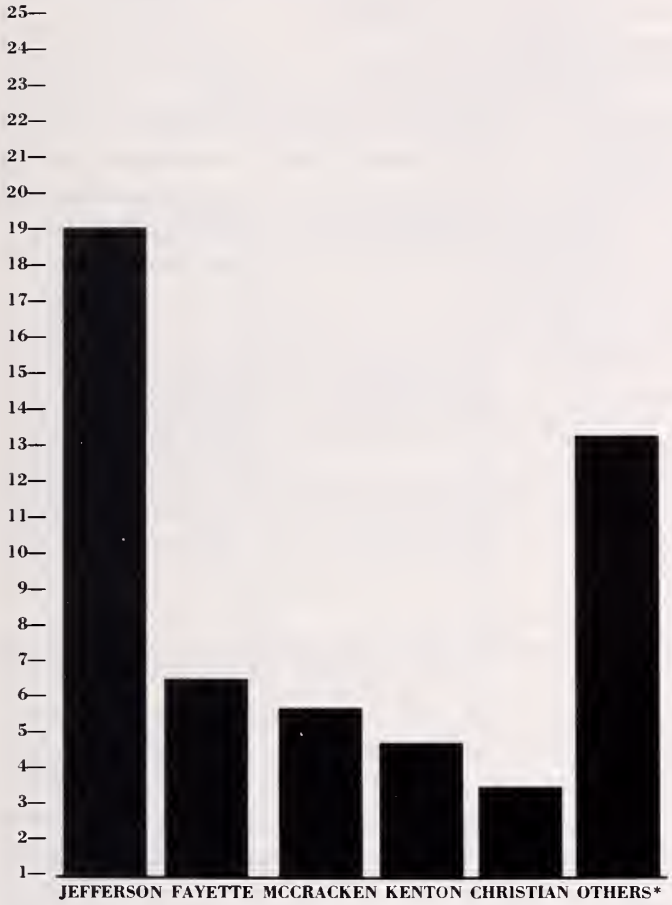
Recent studies have examined the psychological stresses for AIDS patients and their families.[1,39] Such issues as stigmatization, social isolation, loss of control, and grieving are common in AIDS sufferers.[1,39,40] The incidence of AIDS-related suicides, often by leaping from hospital windows, has increased significantly.[41] For families, the fear of contagion and revelation of alternate lifestyles are particularly stressful.[39] The psychological caregiver must provide reliable AIDS information, promote liaison with the primary physician and hospital staff, project a nonjudgemental stance, mobilize community resources, and facilitate grief.[1]

This report discusses the Acquired Immune Deficiency Syndrome in Kentucky. Common physical and psychological complaints of 15 representative AIDS patients are reviewed, two typical clinical vignettes presented, and the responses of the medical, religious, and homosexual communities examined. This manuscript covers our five years of experience with AIDS patients and their families.

Background

As of May 15, 1986, the Center for Disease Control (CDC) has reported 47 cases of AIDS in Kentucky.[30] Thirty-two (68%) of these sufferers have died. . .a figure significantly higher than the national AIDS mortality rate of 53%. There have been three female victims (6.4%), virtually identical to the national average.[30] Blacks, 25% of AIDS victims in the United States, comprise 15% of Kentucky sufferers.[30] Of those AIDS patients in Kentucky whose sexual preference is stated, 64% have been homosexual or bisexual males, slightly lower than the national percentage.[30] Fifteen percent of cases were intravenous drug users, 4% hemophiliacs, and 11% listed as "unknown or others." Transfusion recipients, Haitians, and heterosexual contacts each accounted for 2% of Kentucky AIDS victims.[30] While there have been over 300 pediatric AIDS cases nationally, none have been documented in Kentucky.[30] The age range for cases was 19 to 60 years, with an average of 34.[30] Forty-two percent of AIDS victims are from Louisville and Jefferson County, the state's largest metropolitan area.[30] Blood bank testing of almost 500,000 donations revealed only 5% positive for HTLVIII antibodies.[30] In reviewing these figures, remember that those AIDS patients who were diagnosed in Kentucky, but reside in another state are not included in the above totals. AIDS cases reported by the CDC must meet stringent guidelines, and many feel that the disease is significantly underreported. Figure 1 and 2 compare national and state AIDS occurrence rates. Figure 3 compares rates for selected counties in Kentucky.

FIGURE THREE COMPARISON OF AIDS CASES IN DIFFERENT KENTUCKY COUNTIES



***A total of 13 cases: Counties with one *reported case of AIDS each* are Anderseon, Campbell, Greenup, Henderson, Knox, Letcher, Lewis, Madison, Meade, Mercer, Monroe, Pulaski, and Shelby.**

Case Reports

The 15 AIDS patients discussed in this portion of the manuscript were evaluated by the consultation/liaison psychiatry service at hospitals affiliated with the University of Louisville School of Medicine. This service is an interdisciplinary team consisting of psychiatrists, social worker, nurse, and pastoral counselor. The consultation team evaluates those patients in a medical setting who have a previous psychiatric history and/or exhibit psychological features related to their illness. These 15 AIDS patients represent 33% of the total cases in Kentucky. Seventy-eight percent of the patients were homosexual or bisexual males, and 25% had a history of intravenous drug abuse. Two of the patients were black and two were female. The average age was 27 and the youngest patient was 19-years-old.

The most common AIDS-related medical condition was Pneumocystis carinii pneumonia, experienced by 60% of patients during the course of their illness. Esophageal candidiasis and disseminated Kaposi sarcoma affected 30% of our AIDS population. Other diagnoses included idiopathic thrombocytopenic purpura, adult respiratory distress syndrome, and cerebral toxoplasmosis and cytomegalovirus infections. Many patients underwent invasive procedures including thoracentesis, laparatomy, and bone marrow and brain biopsies. Five of these 15 patients are known to have died.

The most common AIDS-related psychiatric symptom was depression, representing 80% of the consultation requests. Other manifestations included anxiety and panic episodes (5%), psychosis (3%), suicidal ideation/attempts (2%), and mania (2%). Adjustment disorder with depressed mood was the most frequent psychiatric diagnosis, followed by major depression, adjustment disorder with anxious mood, substance abuse, and atypical psychosis. Five patients were treated with anti-depressants, two with major tranquilizers. Two psychotic patients and one depressed individual required inpatient psychiatric care. Follow up for these patients included referral to the Visiting Nurses Association (VNA), peer support groups for AIDS victims and their families, drug and alcohol treatment programs, and individual supportive psychotherapy. This information is summarized in the chart. Two representative clinical vignettes follow.

Clinical Vignette #1

A 29-year-old white male was admitted to the hospital from the state prison after developing a dry cough, fever, and shortness of breath. The patient reported that these symptoms were of two weeks duration. Physical examination revealed red macular areas of the face and petechial lesions of the hypopharynx. He also had an enlarged left cervical lymph node posterior to the sternocleidomastoid muscle. Bilateral expiratory wheezing and a fever were present. Chest X-ray was indicative of an interstitial pneumonitis, and subsequent open lung biopsy revealed Pneumocystis carinii pneumonia. T-cell studies revealed a reversed helper/suppressor ratio, and ELISA and Western Blot tests were positive. Other laboratory findings included elevated titers of cryptococcal antigen in blood and cerebrospinal fluid and positive cryptococcal cultures of the oral mucosa. Hepatitis B surface antigen testing was positive. Intravenous Trimethoprim/Sulfamethoxazole was begun for the

PT	AGE	SEX	RACE	RISK FACTORS	MEDICAL DIAGNOSIS	PSYCHIATRIAC DIAGNOSIS	PSYCHOSOCIAL INTERVENTION
1	19	female	white	heterosexual contacts	Cerebral toxoplasmosis Esophageal candidiasis	Dementia Major Depression	antidepressants Visiting Nurse Association
2*	23	male	white	homosexual	Cytomegalovirus infection Toxoplasmosis	Adjustment disorder with depressed mood	outpatient psychotherapy
3*	37	male	white	homosexual	Chronic cryptococcosis disseminated Kaposi sarcoma Esophageal candidiasis Pneumocystis carinii pneumonia	Adjustment disorder with depressed mood	antidepressants Visiting Nurse Association
4*	29	male	white	intravenous drug use	Adult respiratory distress Pneumocystis pneumonia Cryptococcosis	Major Depression Substance Abuse Antisocial Personality	antidepressants drug treatment facility Visiting Nurse Association
5	25	male	black	homosexual intravenous drug use	Splenic hematoma Non-Hodgkins lymphoma Herpes simplex I Pneumocystis pneumonia	Major Depression Substance Abuse	outpatient psychotherapy
6	20	male	white	homosexual	Pneumocystis pneumonia	Adjustment disorder with depressed mood	outpatient psychotherapy antidepressants
7	35	male	black	homosexual	Pneumocystis pneumonia Thyrotoxicosis	Organic Delusional Syndrome	major tranquilizers inpatient psychiatric care
8*	25	male	white	homosexual intravenous drug use	Kaposi sarcoma idiopathic thrombocytopenic purpura	Adjustment disorder with mixed features	group therapy drug treatment program
9	30	male	white	bisexual	Histoplasmosis Oral candidiasis	Major Depression	antidepressants outpatient therapy
10	27	male	white	homosexual	Kaposi sarcoma	Bipolar Disorder, manic phase	major tranquilizers inpatient psychiatric care
11	24	male	white	transfusion	Esophageal candidiasis Kaposi sarcoma	Major Depression	inpatient psychiatric care
12*	37	female	white	transfusion	Pneumocystis pneumonia	Adjustment disorder with depressed mood	no psychiatric follow up
13	25	male	white	homosexual	Pneumocystis pneumonia	Adjustment disorder with anxious mood	minor tranquilizers outpatient psychotherapy
14	30	male	white	bisexual	Kaposi sarcoma Pneumocystis pneumonia	Adjustment disorder with mixed features	marital therapy
15	32	male	white	homosexual	Herpes Cytomegalovirus	Generalized Anxiety with panic attacks	anxiolytics peer support group

*Patient is known to have died.
Patients listed in this chart were evaluated psychiatrically in Louisville, but may have received the diagnosis of AIDS elsewhere.
For purposes of anonymity and preservation of confidentiality, some non essential identifying features have been changed.

pneumonia, however his pulmonary status deteriorated rapidly. He was intubated and placed on assisted ventillation, followed by a tracheotomy. Eventually, the therapy was changed to treatment with Pentamidine. The patient received 22 doses of this agent with considerable improvment; he was weaned from the respirator after 21 days. Fungal infections responded well to Amphotericin.

The patient had been married for three years and had a 15-month-old daughter. Because of his incarceration, he had not seen his child in three months. The patient admitted to frequent intravenous use of amphetamines, and he often shared needles with "known homosexuals." The patient described himself as heterosexual and had never received a blood transfusion. As his medical condition improved, he became very depressed. He lost his appetite, slept poorly, and often sobbed uncontrollably. He expressed some homicidal thoughts toward his doctors, and refused medication because he was ". . .going to die anyway." A psychiatric consultation was performed during which the patient discussed his fear of death, his daughter's inability to recognize him, and a previous episode of depression. The diagnosis was major depression, Doxepin was begun. Despite the fact that he had two more years to serve in prison, the patient was immediately paroled once AIDS was diagnosed. He insisted upon leaving the hospital against medical advice and was referred to a drug abuse treatment facility and the Visiting Nurses Association. This patient has since died from AIDS, however his wife and daughter have tested negative for HTLVIII antibodies and are symptom free.

Clinical Vignette #2

A 23-year-old single white male presented to a public health clinic complaining of rectal bleeding and dysuria for two weeks. The physical examination revealed an enlarged, tender prostate. Laboratory studies included negative urine, rectal, and penile cultures. The VDRL was weakly reactive, but the FTA was negative. Sigmoidoscopy revealed a friable mucosa. Treatment with Trimethoprim/Sulfamethoxazole was begun and the patient was discharged.

He returned a month later complaining of nausea, vomiting, and vague abdominal pain. Physical examination revealed a macular popular rash on his upper trunk, face, and abdomen. The patient had three enlarged supraclavicular nodes (less than 0.5 centimeters in diameter), a tender cervical node (1cm) and an enlarged right axillary node (1.5 cm). He had a docu-

DIRECTORY FOR AIDS-RELATED SERVICES

HOSPICE OF LOUISVILLE
982 Eastern Parkway
Louisville, Kentucky
(502) 636-5214
(502) 636-5212

VISITING NURSES ASSOCIATION
101 West Chestnut Street
Louisville, Kentucky 40202
(502) 584-2456
serves Jefferson, Oldham and Bullitt Counties in Kentucky

CONSULTATION/LIAISON PSYCHIATRY SERVICE
Department of Psychiatry and Behavioural Sciences
University of Louisville School of Medicine
530 South Jackson Street
Louisville, Kentucky
(502) 588-5867

OUTPATIENT PSYCHIATRIC CLINIC
Department of Psychiatry
University of Kentucky School of Medicine
800 Rose Street
Lexington, Kentucky
(606) 233-6021

BLUEGRASS COMPREHENSIVE CARE CENTER
201 Mechanic Street
Lexington, Kentucky
(606) 233-0444 (24 hour a day crisis intervention line)

GLADE HOUSE (AIDS SHELTER)
400 South Sixth Street
Louisville, Kentucky
(502) 637-6882 (screening line for admissions)

GAYS AND LESBIANS UNITED FOR EQUALITY HOTLINE
(502) 637-4342
Hours: 6PM-1AM, seven days a week

GAYLINE
Lexington Gays Services Organizations
(606) 231-0335
Hours: Wednesday and Thursday 8-11 PM; Friday 6-9 PM

NATIONAL AIDS HOTLINE
sponsored by the U.S. Public Health Service
1-800-342-AIDS (toll free)
8:30 AM to 5:30 PM EDT

NEW YORK AIDS HOTLINE
1-800-221-7044
Hours: Monday through Friday 3PM-9PM EDT

CRISIS CENTER HOTLINE
sponsored by Seven Counties Services
(502) 589-4313; information about psychiatric services available in all Kentucky counties.
Hours: 7 days a week, 24 hours a day.

mented weight loss of seven pounds in a month. Laboratory data included strongly positive cytomegalovirus, Epstein Barr virus, and toxoplasmosis titers. Hepatitis B core antigens were positive. Nodal biopsies revealed hyperplasia and acute lymphadenitis. The ELISA and Western Blot assays were strongly positive. The patient was treated with a series of antiviral agents, and symptomatically for gastrointestinal distress. He improved significantly and was discharged to the care of his family physician.

Eight months later, he was evaluated in the emergency room after a polypharmacy overdose in a suicide attempt. During the psychiatric interview, the patient, a sexually active homosexual, discussed his alienation from his parents, repeated hospitalizations, and fears of death. As a result of the AIDS diagnosis, a long-standing relationship with a man 30 years older had ended. The patient reported that he had attempted suicide to ". . .decide when and how I die." At the request of the psychiatrist, the patient's parents, both in their mid 50's, visited him for the first time in five years. They learned that their son was homosexual and dying of AIDS at the same time. After several meetings with the social work clinician and their pastor, his parents agreed to allow him to return home. He died three months later.

Community Resources

The care of the AIDS patients and their loved ones requires a community-wide effort. In many instances the physician must rely on social support agencies to meet the needs of these terminally ill patients. Those organizations discussed below have been helpful in improving the quality of care for AIDS patients in Kentucky. The agencies can be contacted by means of the Directory.

Visiting Nurses Association

In 1890, a group of concerned women formed an organization to provide nutrition and other support for needy infants. Thus began the Visiting Nurses Association (VNA), a private, non profit organization that has been meeting the needs of homebound patients for the past 96 years. The VNA serves a wide range of people from infancy to geriatrics, and provides such services as wound care, physical therapy, occupational therapy, and administration of parenteral medication. The VNA's medical health nurses provide psychiatric treatment, and maintain an invaluable link between hospital and home for many AIDS patients. Referrals are made by primary care physicians, or in the case of the mental health nurse, by a psychiatrist. The nurse assigned to the case supplies periodic written reports to the physician. For the AIDS patients who have been referred to VNA, the nurse provides quality care outside the hospital, thereby decreasing a major source of morbidity associated with AIDS. In the home environment, patients can receive such treatments as intravenous chemotherapy and nasogastric feeding. The AIDS families receive instruction in patient care that includes realistic precautions to avoid contagion. Mental health nurses are instrumental in facilitating grief for AIDS sufferers and their families. They keep the psychiatrist informed about the need for more direct intervention such as medication or psychiatric hospitalization. The Visiting Nurses Association is an integral part of this community's efforts to meet the medical and emotional needs of AIDS patients.

Hospice Association

Locally established in 1978, the Hospice Association is an organization consisting of social workers, chaplains, nurses, and home health aides. In addition to the professional staff, Hospice utilizes volunteer counselors who undergo extensive training. While Hospice Associations exist in many communities nationwide, the level of activity varies widely. Referrals are made by the physician who remains the primary care giver, yet works closely with Hospice personnel. The patients are generally in the last six months of life.

The Hospice Association has been helpful in coordinating medical care, assisting patients in contacts with social agencies, and facilitating grief. In Louisville, Hospice is directly involved in the care of many AIDS patients. In addition, the organization recently completed training of its first AIDS sufferers as volunteer counselors. The issues raised in treatment of terminally ill AIDS victims are similar to those involved in other conditions, according to a Hospice representative. Such concerns as adequate medication for pain relief, decisions regarding life support mechanisms, and acceptance of the inevitability of death have long been the province of Hospice Associations. These are issues for the AIDS patient as well. This organization provides a beneficial, multidisciplinary community based support network for AIDS patients and their loved ones.

Aids Shelters

Many AIDS sufferers have been disowned by their families, abandoned by lovers and evicted by landlords. In an effort to meet the needs of these displaced persons, many communities have established AIDS shelters. One such facility was opened in Louisville earlier this year. Glade House, co-sponsored by the St Martin's Catholic Church and St. Francis of the Fields Episcopal Church is located in central Louisville and provides a residential setting for AIDS sufferers. Similar shelters are in development in Lexington and other Kentucky cities. Shelter inhabitants must be ambulatory and in the early stages of the disease. No in-house medical or nursing care is provided. While dwellings of this type enable the AIDS patient to live in a supportive environment with other persons similarly afflicted, continued efforts are being directed toward establishment of a domiciliary capable of providing nursing care. Until such intermediate and skilled care facilities are a reality, AIDS patients will continue to experience the frustration of repeated hospitalizations.

AIDS Hotlines

How does a person get AIDS? Should I be tested for AIDS? My husband has AIDS. What should I do? These are but a few examples of the many AIDS-related questions received by hotlines across the country. Crisis lines have traditionally served as disseminators of information and sources of nonjudgemental support. They are especially attractive to AIDS patients and their loved ones, because of the anonymous nature of the interaction. Many callers, in fact, simply need to feel that there is someone who will listen to what they have to say. In many cities, AIDS Hotlines are manned by sufferers of the disease and/or members of the homosexual community. The US Public Health Service sponsors a toll free national AIDS Hotline. While there are no specific AIDS Hotlines in Kentucky, the Louisville based organization Gays and Lesbians United for Equality crisis line and Lexington's Gays Support Services "Gay Line" report that a significant portion of their calls are AIDS related. Hotline workers have participated in a training program. While many callers are triaged to appropriate agencies, others merely appreciate the opportunity to share with someone the many stressors that are a part of coping with AIDS.

Conclusion

The Acquired Immune Deficiency Syndrome has many physical and psychological sequelae. As illustrated by the clinical vignettes, its victims are generally young, previously healthy, and from populations that have traditionally been ostracized by society. After first appearing in larger metropolitan areas, AIDS has spread to every state in the union. In Kentucky, many organizations such as Visiting Nurses Associations and Hospice are now serving AIDS patients. The religious and homosexual communities are providing homes and crisis counseling. Area mental health professionals are meeting the emotional needs of victims and their families, and dissipating public hysteria concerning the disease. These directions, however, are only the beginning of what must be an intensified community effort to provide quality care for AIDS sufferers until they are offered a chance for survival.

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Photodynamic Therapy for Tumors

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Photodynamic therapy (PDT) represents a new modality for the treatment of cancer. The basis of the therapy is light activation of a chemotherapeutic agent known to localize in tumors. Dihematoporphyrin is selectively retained in cancers and, when stimulated by red (630 mn) light, forms free radicals that destroy tumors. Presently, clinical trials are underway to assess the value of PDT in bladder and pulmonary neoplasms.

Shortly after the first functioning laser was produced in 1960 attempts were made to apply light technology to the treatment of malignant neoplasms.[1,2] For a number of years progress was hampered by inadequate instruments as well as primitive optical systems for light delivery. Better systems became available in the early part of this decade. Recently, the Argon and ND:YAG lasers have brought thermal laser therapy into clinical use.[3,4] The concentrated light energy of a laser produces heat when it comes into contact with tissues. Flexible fibers have been developed and, when combined with endoscopic examination, allow light to be transmitted to poorly accessible sites within the body. These advances in laser technology and fiberoptics have led to successful treatment of obstructing tumors in the tracheobronchial tree, esophagus, rectum and genitourinary tract.

Simultaneous with the development of *thermal* laser technology another form of laser therapy has been evolving. This treatment is based on the *non-thermal* interactions of light with neoplastic tissues. The term applied to this modality is *photodynamic* therapy.

Photodynamic therapy (PDT) uses a photosensitizing drug (hematoporphyrin derivative) or its purified component, dihematoporphyrin (DHE). The principles of PDT are dependent on some interesting properties of DHE. DHE is selectively retained in malignant lesions when injected intravenously. Normal tissues (except liver, spleen, kidney and skin macrophages) clear the drug within 24-48 hours.[5] Significant concentrations of DHE may be detected in tumors for 10-12 days after injection. Tissues that contain the drug show fluorescence when exposed to specific wavelengths of light,[6] and, when exposed to 630 nm light, DHE undergoes a photochemical reaction and destroys the tumor.[7] Activation of the drug in the presence of oxygen produces highly reactive free radicals, notably singlet oxygen. These molecules interact with cell membranes, destroying their integrity.[8] Conclusive evidence is not available as to whether this event takes place primarily in tumor cells, tumor vessels, or in both locations. However, it has been proved both experimentally and clinically that cancers can be permanently eradicated using this technique.[9-11]

Localization of porphyrin in tumors was described in 1903 and verified by Lipson in 1961 at the Mayo Clinic.[12] In 1966, Lipson reported tumor destruction after exposing photosensitized animals to light.[13] Further advances had to await technological improvements. Dougherty, in 1976, published the results of a series of spontaneous animal tumors successfully treated with PDT.[10] The first clinical results in humans were reported in 1978.[11] These patients had developed recurrent cutaneous metastases after operation and irradiation for breast cancer. Since that trial, more than 3000 patients with a variety of neoplasms have been treated. It is known that most neoplasms accumulate the drug. The exceptions are those tumors that are generally devoid of neovascularity, *eg*, chondrosarcoma.

Photodynamic therapy is theoretically attractive because it is highly selective. Since the photosensitizing compound rapidly leaves normal tissues, a therapeutic ratio is developed between the concentrations in neoplastic and surrounding non-neoplastic tissues. This therapeutic margin allows complete destruction of localized malignant tumors without serious or permanent deleterious effects of adjacent normal tissues. Furthermore, the therapy can be used in patients who have had full courses of radiation and chemotherapy. Photodynamic therapy can also be administered repeatedly to residual tumor should that be necessary in cases where tumor burden is large.

DHE has few toxic manifestations in therapeutic dosages. The drug does cause some skin photosensitization, and patients must remain out of of direct sunlight four to eight weeks after injection. They can, however, carry out normal daily activity without danger. DHE is

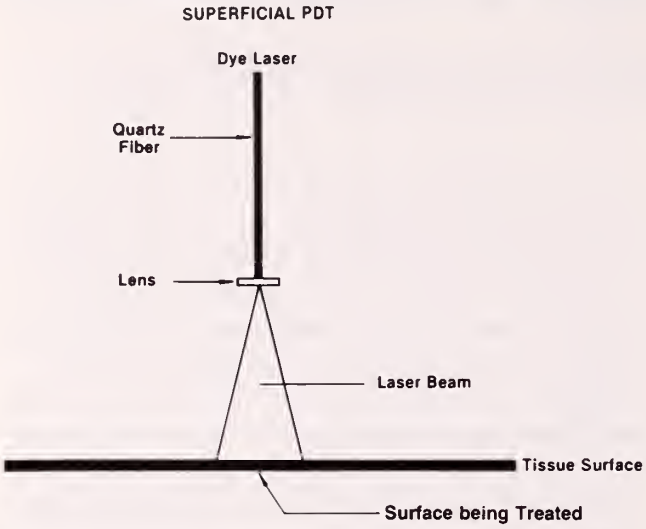

Fig. 1: Delivery of superficial PDT treatment.

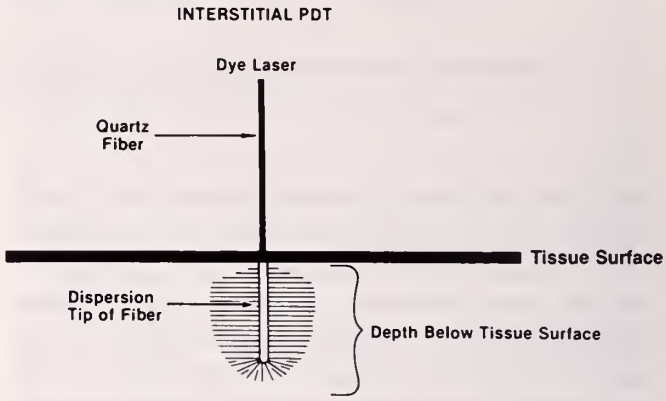

Fig. 2: Delivery of interstitial PDT treatment.

not mutagenic and has not proven carcinogenic.[15] The limiting features of photodynamic therapy to date stem primarily from the fact that light transmission through tissue is limited. At present, adequate light penetration can be achieved at a distance of 5-15 mm from the emitting light source, depending on drug concentration in the tumor, light dose administered, and light transmission properties of the tumor. These parameters vary considerably from tissue to tissue.

Photodynamic therapy in the clinical setting at present requires rather cumbersome equipment that is not suitable for wide clinical use. An argon-ion laser is used to energize a dye laser, which in turn produces red light of the appropriate wavelength to activate DHE. This beam must then be transmitted via flexible fiberoptic fibers either to the tumor surface (Fig. 1) or implanted within the tumor (Fig. 2).

Techniques for calculating dosimetry are in their infancy. Only recently have devices been developed to estimate tumor drug concentration, light transmission properties and geometric characteristics of the tumors.[16] Up to this time, dosimetry has been empiric. Only a few drug dosages have been used, and only nonthermal doses of light have been administered. Little therapy has been done with interstitial implantation of fibers except in the bronchus and esophagus.

Early trials involved treatment of cutaneous metastases in patients who have failed conventional therapy. The results have been encouraging (Figs. 3-6). Some patients have been followed for over four years without evidence of recurrence. Using purified drug and an argon-dye laser system to produce monochromatic light, the trials have been expanded to other tumors. The most promising among these are those treating superficial bladder cancer and bronchogenic carcinomas of the lung obstructing the bronchi. Benson, at the Mayo Clinic, has treated individual papillary tumors in patients with superficial bladder cancer.[17] Other groups have administered treatment to the entire bladder mucosa for diffuse disease.[18] In the latter case, a bulb diffusion tip on the end of the laser fiber is used to provide isotropic illumination to the entire bladder mucosa through the cystoscope.[19] After treatment, the patient experiences dysuria, hematuria and difficulty in voiding, but the symptoms subside over the course of one to two weeks. A number of patients have been reported to remain disease free for periods of up to two years.

Endobronchial cancers, both early and advanced, have been treated with photodynamic therapy. Hayata *et al*,[10,11] in Japan, have reported a series of individuals with small endobronchial tumors who were not candidates for operation or radiation therapy. These individuals were treated with PDT and have remained disease free for up to five years. Balcham, at the University of Southern California, recently completed a study in which 130 patients with obstructing endobronchial lesions in advanced carcinoma of the lung were treated with photodynamic therapy.[20] The light was delivered under local anesthesia through a flexible fiberoptic bronchoscope (Fig. 7). Treatment sessions lasted approximately 20 minutes. Each patient required between one and three sessions depending on the length of the obstruction along the bronchus. Most patients required only one PDT treatment. Approximately 48 hours later, each patient underwent a second bronchoscopy to evacuate necrotic tumor debris. Of the 130 patients, 129 had the airway successfully opened. The single patient who failed had a calcified tumor. Complications of treatment of the

Fig. 3: Metastatic breast cancer to chest wall.

Fig. 5: Necrotic metastases 24 hours post-treatment.

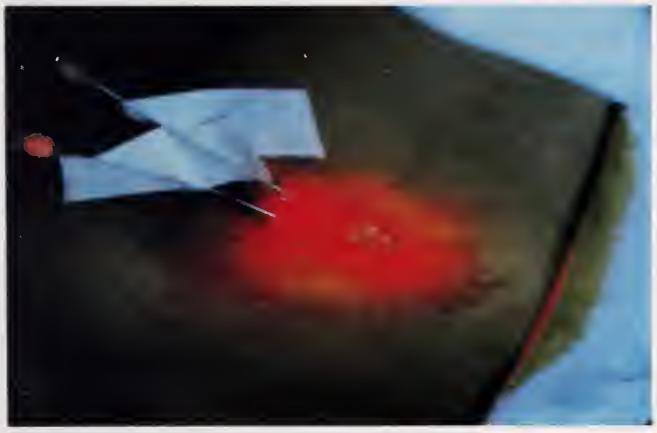

Fig. 4: Interstitial treatment to chest wall.

Fig. 6: Tumor free scars 4 months post-treatment.

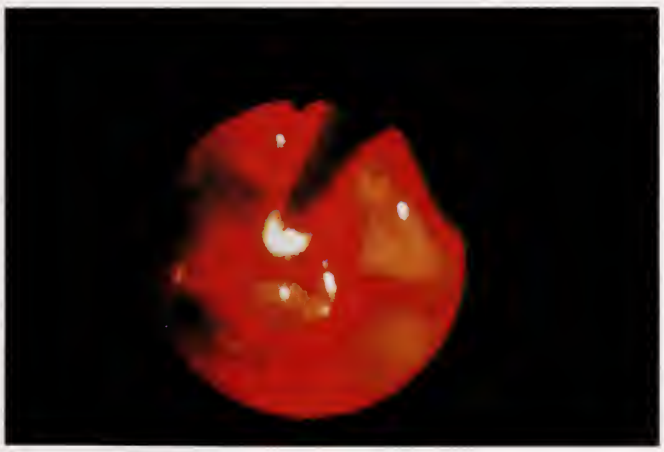

Fig. 7: Interstitial fiber placed in endobronchial tumor.

airway include pneumonia and hemorrhage. Pneumonia developed frequently early in the series when the second "clean-up" bronchoscopy was not performed. Hemorrhage also occurred early in the series when patients were given relatively large doses of light to areas where there was tumor encasing the pulmonary vessels close to the right mainstem bronchus. After the light dose was reduced, no further hemorrhage or fatalities were recorded. There were five deaths in 130 patients. Several other investigators have also treated pulmonary neoplasms successfully.[11,12]

Carcinoma of the esophagus with obstruction has recently been a focus of photodynamic therapy research in China. A report from the Henan Tumor Institute discusses a large series of patients with obstructing lesions who were palliated successfully.[20] As with the endobronchial tumors, the number of therapeutic sessions required is related to the length of the initial stricture. In this series, there were no deaths and no serious complications. Earlier attempts at treatment of esophageal tumors in patients with associated tracheal invasion or mediastinal invasion showed occasional fistualization with its disastrous consequences. As with all therapeutic modalities, some selectivity must be used in treating patients.

Wile *et al* have demonstrated that PDT has activity in head and neck tumors.[21] He was able to induce a complete or partial response in 17 of 21 patients who had recurrent disease after full courses of surgery, irradiation and chemotherapy. The duration of these responses has been over one year in some cases.

Photodynamic therapy represents an entirely new approach to the local/regional treatment of cancer. The potential range of its applications has barely been explored. Basic scientific efforts are now under way to quantify the light, drug and tissue parameters essential to the successful application of this modality. New and more sophisticated instrumentation is required to assure safe, consistent and appropriate delivery of light. Research is currently under way to develop other drugs with similar or more selective properties.[22] The first controlled and randomized clinical trials have been initiated, and our group at the University of Louisville is participating. These studies include treatment of cancer of the bladder and lung. Pilot studies are being carried out for the treatment of esophageal, recurrent breast, recurrent rectal, and head and neck carcinomas. It may be some time before the ultimate role and importance of photodynamic therapy in the treatment of neoplastic disease is defined. However, it is clear, even now, that applied light technology will have some role in the treatment of cancer.

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Lymphadenopathy In Association With Benign Common Bile Duct Obstruction Simulating Carcinoma

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A patient who presented with weight loss, jaundice, a palpable distended gallbladder, and markedly elevated serum alkaline phosphatase was found to have an irregular narrowing of the distal half of the common bile duct on percutaneous transhepatic cholangiogram. Exploratory celiotomy was carried out. Operative findings disclosed lymphadenopathy of the celiac, mesenteric, pericholedochal, parapancreatic, and posterior pancreatic duodenal nodes surrounding the distal half of the common duct. Frozen section biopsies of the nodes and pancreas were negative for malignancy. Biliary-enteric bypass was performed. The patient was discharged with clinical and biochemical evidence of relief.

Common bile duct compression secondary to a benign inflammatory process has been reported previously in the literature.[1] Most of these are secondary to chronic pancreatitis, pancreatic pseudocyst, and fibrosis from advanced pancreatitis.[1] Preoperatively, it is sometimes difficult to distinguish between benign or malignant etiology of this ductal obstruction from the appearance of the transhepatic cholangiogram. Operation is performed for treatment of obstructive jaundice and to rule out pancreatic carcinoma.[2,3] Other indications for surgical exploration include ascending cholangitis and progressive biliary cirrhosis.[2,3] We report here a case of benign common duct obstruction in association with diffuse intraabdominal lymphadenopathy with no specific pathologic diagnosis on pancreatic biopsy. This represents a unique case mimicking carcinoma in its clinical presentation of which we are aware of no previous reports in the literature.

Case Report

A 61-year-old white male was referred to the Lexington Veterans Administration Hospital by his family physician for evaluation of abnormal liver function tests. Past medical history was significant for peptic ulcer disease treated with Cimetidine and antacids, adult onset diabetes mellitus treated with NPH insulin and diet, and alcohol abuse. On admission, the patient gave a history of a 35-pound weight loss over the previous six months as well as drenching night sweats over the same time period. The patient also reported occasional melena alternating with clay colored stools, dark urine and right upper quadrant pain radiating to his back. The patient denied hematemesis, hematochezia, change in stool caliber, nausea, vomiting, steatorrhea, or anorexia. There were no known allergies. Admission medication consisted of cimetidine, NPH Insulin and Mylanta. Social and work history revealed exposure to no hepatotoxins other than alcohol.

Physical examination showed the patient to be icteric and thin. Examination of the neck showed no jugular venous distension or adenopathy. Heart and lungs were within normal limits. The abdomen was flat but there was a visible, palpable nontender gallbladder measuring 5 cm. x 3 cm. Bowel sounds were active. Rectal exam was negative for masses, and the stool was light brown and negative for occult blood.

Admission blood count, electrolytes, chest x-ray, and electrocardiogram were all normal. Abdominal film showed a calcified gallbladder without any evidence of mass lesion or pancreatic calcification. Serum chemistries showed an alkaline phosphatase of 2730 IU/L, GGT 3800 IU/L, total bilirubin 3.1, SGOT 104, amylase 70. Coagulation studies were within normal limits. The patient was admitted for workup of obstructive jaundice.

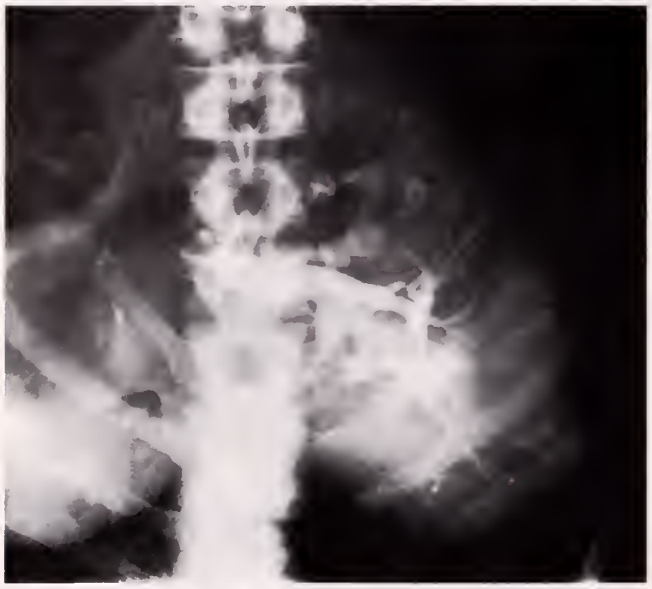

Fig. 1: Preoperative percutaneous transhepatic cholangiogram showing dilated proximal ducts and "rat tail appearance" of distal common bile duct.

Subsequent studies consisting of fungal serologies, VDRL, hepatitis B surface antigen, and alpha fetoprotein were all negative. Skin tests for tuberculosis and histoplasmosis showed insignificant reactivity. CEA level was noted to be 7.8. The patient underwent the following radiologic studies:

1. Ultrasound of the gallbladder, pancreas, and liver showed "dilated common bile duct to 1.2 cm. with intrahepatic duct dilatation; calcified gallbladder, normal pancreas with no evidence of inflammation or mass."
2. Upper gastrointestinal series showed "scarred duodenum."
3. Percutaneous transhepatic cholangiogram showed distal narrowing of the terminal half of the common bile duct probably secondary to malignancy (Figure 1).
4. Liver-Spleen Scan ^{99m}Tc showed "normal liver without evidence of metastasis or mass effect."

The patient was subsequently explored for what was felt to be common bile duct obstruction secondary to either pancreatic or biliary tract malignancy. In the abdominal cavity, the patient was noted to have diffuse lymphadenopathy as well as a finely nodular spleen. Biopsies of celiac, peripancreatic, mesenteric, and periaortic nodes disclosed "follicular hyperplasia" with no other pathologic diagnosis. Pancreatic biopsy showed normal pancreas with no evidence of inflammation or malignancy.

The pericholedochal and posterior pancreatic duodenal lymph nodes were extremely large, and inflamed, and the gallbladder and common bile duct above this area were markedly distended. The patient underwent truncal vagotomy and gastrojejunostomy as treatment of his ulcer diathesis, a cholecystectomy and choledochojejunostomy for diversion of biliary flow, and feeding jejunostomy. Postoperatively the patient's bilirubin returned to normal with his alkaline phosphatase returning to 450 IU/L by the 10th postoperative day. Subsequent studies of the lymph nodes obtained at surgery consisting of cultures and stains for fungus, tuberculosis, and bacteria were all negative. He was subsequently discharged on a regular diet.

Discussion

In this patient who presented with a 35-pound weight loss, diabetes mellitus, jaundice (t.bili = 2.9), Courvosier's gallbladder, an alkaline phosphatase of 2730 IU/L, and an irregular narrowing of the distal common bile duct, a presumptive diagnosis of malignancy was made. Exploratory celiotomy disproved this. Chronic pancreatitis as a cause of this biliary obstruction was entertained because of similar cases reported in the literature.[4] However, the absence of calcification on abdominal films and the pancreatic biopsy which shows nonpathologic tissue make the above diagnosis questionable. The enlarged lymph nodes particularly the pericholedochal and posterior pancreatic duodenal nodes firmly adherent to the head of the pancreas may have caused a localized inflammation compressing the common bile duct. As mentioned earlier, the patient was studied extensively for any infectious cause for this lymphadenopathy, including histoplasmosis and tuberculosis, without success. This raises the possibility of benign pancreatic inflammation draining into these lymph nodes causing reactive hyperplasia. This has been reported in the literature.[1] Lymphadenopathy, however, has not been mentioned.

The current case is unique in that we are unable to determine the etiology of this lymphadenopathy in association with common duct obstruction of a benign nature. Therapy is indicated because of obstructive jaundice and the inability to rule out carcinoma.[2,3] Moreover, if the biliary obstruction is not relieved, the threat of biliary cirrhosis and suppurative cholangitis is always present.[5] Even in the absence of jaundice a persistent or increasing serum alkaline phosphatase is an indication for operative bile duct decompression.[6]

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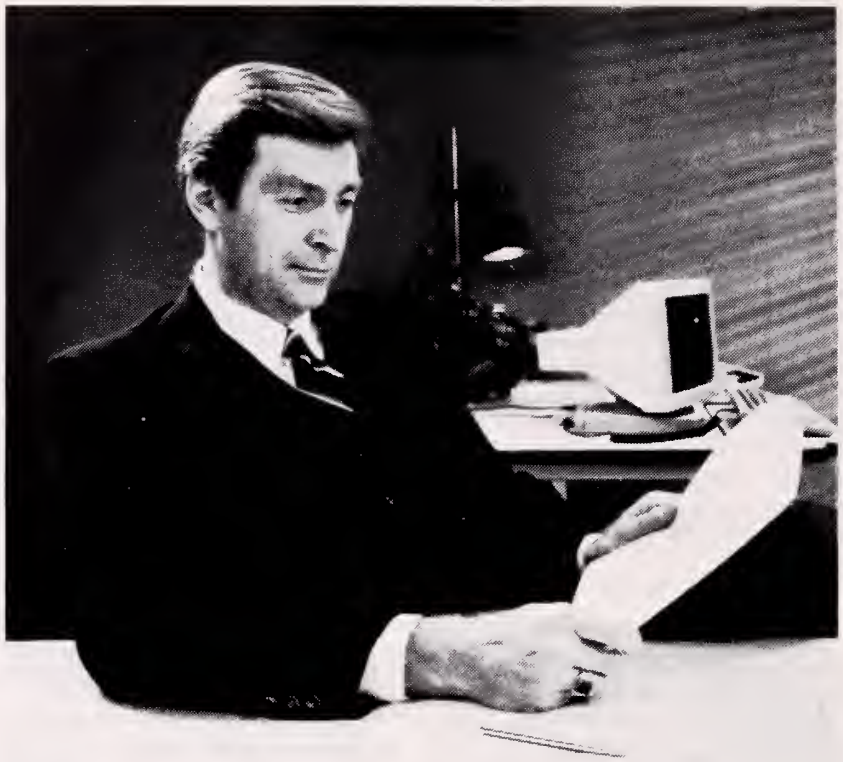

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Carts & Caddies

I've always had an unreasonable tendency to look backward to the "good old days." For example, I have on this page in the past lamented the regrettable inclination of modern architects to construct work areas and patient care areas in hospitals with no windows—very bad. Likewise, I have grieved about real estate developers planning new neighborhoods with no sidewalks—very bad.

Now I want to address another retrogressive step that has sadly been taken by modern society—the elimination of the caddie. The practice of medicine and the practice of golf have been intertwined for many decades. It seems proper, therefore, that this important subject should be discussed in this prestigious medical journal.

In the old days, most of our golf courses furnished caddies. This achieved two very desirable side effects: (1) Gainful employment was furnished the youth of our communities during the summer months. Not only were the caddies rewarded with significant financial remuneration for their healthful outdoor work, they were further rewarded by their fairly close exposure to those outstanding gentlemen (and ladies) who are known to inhabit golf courses. (2) The golfers were forced to walk around our beautiful golf courses and by so doing greatly increased the healthful and social benefits of the marvelous sport in which they were participating.

How can it possibly be that we moved away from the caddies to the horrible golf carts which are standard equipment at almost every golf course in America today? The answer to that question has to do with the almighty dollar. Golf cart rentals have become such a lucrative part of golf course operations that the caddie programs at most of our courses have been permitted to wither away and die. Those wonderful caddies have been replaced by those dreadful carts, the most dreadful of which are the gasoline varieties which emit offensive noises and smells. The golfer's pleasant four to five mile stroll over beautiful terrain which promoted health and stimulated delightful conversations with his companions has been replaced with a hurried, bumping, lurching, careening, noisy jaunt which has a much less desirable effect on health and happiness.

Oh for the good old days of windows, sidewalks and caddies.

McHenry S. Brewer, M.D.

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The Care of the Elderly

JOHN C. WRIGHT, M.D.

It is not enough for a great nation to have added new years of life. Our objective must be to add new life to these years.

John F. Kennedy

With this issue of the* Journal of the Kentucky Medical Association, *the Committee on Care of the Elderly will begin a series of articles, titled "CLINICAL NOTES ON AGING." Current information on geriatric medicine and gerontology will be presented.

Most physicians began medical practice after training in programs that did not emphasize the unique aspects of geriatric medicine. For example, in 1970, geriatric education was surveyed utilizing the catalogues of 99 medical schools. In more than half of them, there was not one citation about aging. Although 10 offered some geriatric training in general clinical courses, only 14 offered special clinical courses in geriatrics or aging. Most of these were offered in psychiatry, preventive medicine or public health courses.[1]

For optimum care of our older patients, a better understanding is required of the physiologic/pathophysiologic alterations of aging and a greater knowledge of the clinical manifestations of disease occurring with aging. The interacting triad of social, psychologic and physical variables are more interdependant in this group than in younger people. This further requires a better understanding of these interactions and their management. The care of the elderly is frequently facilitated by sharing responsibility for care with a variety of affiliated professionals available within the community.

The proportion of elderly people in this and every country is increasing.[2,3] For most of this century the older population in the U.S.A. has been increasing more rapidly than the remainder of the population. In 1900, only 4% of the total population, about 3.1 million people, were 65 and older and only about 0.2% of the population or 123,000 people were 85 and older. In 1980, 11.3% of the United States population or 24.5 million people were 65 and older and 1% or 2,240,000 people were 85 and older.[4] In the last two decades, the 65 and over age group increased two times faster than the rest of the population.[5]

This rate of growth is expected to continue into the early portions of the 21st century. . .until the "baby boomers" of the 1960's reach old age. Then, about 2020, there will be a dramatic increase in the number and proportion of elderly as well as the rate of increase. In 2030, it is projected that 21.1% of the population or over 64 million people will be over 65 and 2.9% or 8,801,000 over 85.[6]

The population of Kentucky in 1900 was 2.1 million, with 77,000 or 3.6% over 65.[7] By 1980, the census showed that there were 3.66 million people living in Kentucky. Of these 410,000 or 11.2% were 65 or older and 35,000 or 1% were 85 or older. By 1984, the most recent estimate available, the 65 and over group had increased by 30,000 and the 85 and older group by 2,000 people. It is estimated that in the year 2020 there will be 918,000 people 65 years of age and older. This represents 17.8% of Kentucky's estimated population of 5.1 million. The 85 and older age group will comprise 2.6% of the total population or 131,000 people.[8]

Concurrent with the increase in numbers of elderly, human fertility levels have declined in the U.S.A. This results in increase in the ratio of elderly persons to working age persons, known as the "support ratio." It reflects the fact that working age groups support nonworking age groups. This ratio has surged from seven elderly for every 100 working age people (18 - 64 years), to almost 19 in 1982 and a projected 38 in 2050.[9]

These dramatic changes, are particularly important to physicians considering their economic impact on our country. In 1981, persons 65 and older accounted for

33% of our country's personal health expenditures, some $83.2 billion ($83,200,000,000.00).[10] Physician care amounted to almost one fifth of this amount, $15.6 billion.[11] For all specialties, 30% of physicians visits were for persons aged 65 or older in 1979.[12] Those over 65 accounted for 6.3 visits per person per year, 1 1/2 more visits per person per year than for persons in the 45 to 54 year group. It was estimated that per capita expenditures were $824 for persons under age 65 and $3,140 for those aged 65 and older. Hospital care accounted for 44% of the health care costs or $36.6 billion.[13]

While cure of a single problem is the usual goal of medical care of the younger person, maintenance of optimum function and quality of life are more appropriate goals for the older person. A person's health and well being is determined for the interaction of the normal changes of aging, chronic disease states present and acute problems present on their physical, social, and psychologic domains.

We see, then, dramatic growth occurring in a segment of the population with unique problems and characteristics that traditionally have not been adequately addressed in medical education. The costs of care of the elderly are proportionately larger than for any other segment of the population. Goals of care are different and emphasize maintenance of optimum function and quality of life.

This column will consider and present the various facets of care of the elderly. We will answer your questions related to elderly care. Your comments and suggestions are welcome and encouraged.

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There is a song that is very popular at the present time. It is called, "That's What Friends Are For!" It is a most appropriate description for the Ronald McDonald House. Kentucky is very fortunate to have two Houses to serve the pediatric families around the state that come to Lexington and Louisville for treatment. These "homes away from home" have provided lodging and emotional support to many families in the last year and a half. It is with great pride that the auxiliaries across the state have supported these Houses.

It is no secret to the Auxiliary that one of these Houses was founded by the Fayette County Medical Society and Auxiliary. It took nearly five years to see the project completed, but the results have been incredible.

The Fayette County Auxiliary contributed in every aspect to the development of the House. They attended planning sessions, studied house plans, visited Houses around the country, raised money, gave talks and formed a wonderful coalition with McDonald's and the Parents Group. They continue to give endless hours to the House as volunteers.

In September, Ronald Houses across the country will celebrate the opening of the 100th House. It will be a special time for the Ronald Houses and certainly a time to reflect on the wonderful gift these Houses give to the families who need them.

Since opening in December of 1984, the Lexington House has served 1050 families from 76 counties in Kentucky and 21 states. The Louisville House has served over 1600 families since opening.

Of the 100 Houses open in the United States and abroad, only two can trace their founding to auxiliary members and physicians. Lexington is one of those Houses. In a time when medicine seems to be the brunt of criticism and malpractice suits are common, it is indeed a credit to medicine that this House bears the name of a medical society and auxiliary.

Auxiliary members across the country have aligned themselves with the Ronald House. Jefferson County Auxiliary is a great benefactor to the Louisville House. Kentucky has been a pioneer in this worthwhile endeavor and we are proud to boast about our two "Houses that love built."

What better way to give back to our communities and to say, "AKMA we're giving medicine a good name."

Phyllis Cronin
AKMA President

Highlights of Emergency

More than five hundred people attended this year's Emergency Medical Care Seminar on June 10, 11 and 12. The morning program presentations included themes on "Sports Injuries, "Crisis Intervention," and "Emergency Medicine on Trial." A special feature this year was the enactment of a mock trial with fictional characters based on issues that have arisen in malpractice cases.

Luncheon speakers included R. Quin Bailey, M.D., Danville, discussing KMA's involvement in Kentucky's high school athletics; George R. Nichols, M.D., Louisville, Kentucky's Medical Examiner and William C. Devries, M.D., Louisville, who spoke on the artificial heart experience.

R. Quin Bailey, M.D., Danville

E. Truman Mays, M.D., Somerset (left) and William C. DeVries, M.D., Louisville

Medical Care Seminar

A "mock" trial was held during the EMCS to highlight the theme "Emergency Medicine on Trial."

"Mock" accidents were staged for the annual ambulance competition.

E. Truman May, M.D., (left) Chairman, Emergency Medical Care Seminar and George R. Nichols, M.D., Louisville

The Louisville Fire Department presented a demonstration on "Cave-ins & Confined Space Extrication."

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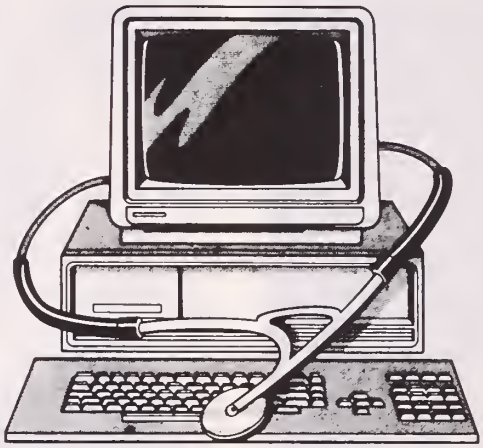

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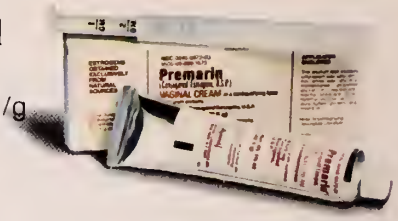

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1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA.

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.

2. ESTROGENS SHOULD NOT BE USED DURING PREGNANCY.
The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) **Osteoporosis (abnormally low bone mass).** Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

CONTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (See Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

a. Increased sulfobromophthalein retention.
b. Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased norepinephrine-induced platelet aggregability.
c. Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered.
d. Impaired glucose tolerance.
e. Decreased pregnanediol excretion.
f. Reduced response to metyrapone test.
g. Reduced serum folate concentration.
h. Increased serum triglyceride and phospholipid concentration. As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow; dysmenorrhea; premenstrual-like syndrome; amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued; erythema multiforme; erythema nodosum; hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido.

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females.

DOSAGE AND ADMINISTRATION:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. *Given cyclically for short-term use only.* For treatment of moderate to severe *vasomotor* symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.
2. *Given cyclically:* Female castration. Osteoporosis. Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis—0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals.

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

References:

1. Whitehead MI, Townsend PT, Pryse-Davies J, et al: Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium. *N Engl J Med* 1981;305:1599-1605 **2.** Paterson MEL, Wade-Evans T, Sturdee DW, et al: Endometrial disease after treatment with oestrogens and progestogens in the climacteric. *Br Med J* 1980;280:822-824 **3.** Magos AL, Brincat M, Studd JWW, et al: Amenorrhea and endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women. *Obstet Gynecol* 1985; 67: 496-499. **4.** Whitehead MI, Lane G, Siddle N, et al: Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women. *Semin Reprod Endocrinol* 1983;1:1;41-52. **5.** Barnes RB, Roy S, Lobo RA. Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women. *Obstet Gynecol* 1985;66:216-219

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Highlights of Trustee District Meetings

KMA President Wally O. Montgomery, M.D., Paducah, addresses a large crowd at the 1st District meeting in Paducah.

Mrs. Wally O. Montgomery, wife of the President of KMA, and Royce E. Dawson, M.D., of Owensboro, are shown above. Doctor Dawson is President of the Kentucky Board of Medical Licensure.

KMA Trustees have now completed meetings in all 15 Trustee Districts. Wally O. Montgomery, M.D., President of the Association, documented KMA's efforts to achieve professional liability reform during the 1986 Kentucky General Assembly. In addition, discussion took place with regard to KMA's response to the crisis and long-range plans of the Association to resolve the problem. Several Districts discussed the proposed plan of action which is the culmination of a two-year study by 23 specialty groups, KMA, and KMIC representation.

If the plan is adopted by the KMA House of Delegates, the target date will be either through a Special Session of the Kentucky General Assembly or the 1988 Regular Session of the KGA.

Other topics covered during the meeting included the Special Task Force set up by the KGA to study the liability crisis and the coalition of business, industry, professions, and others to offer recommendations for easing the liability crisis.

Doctor and Mrs. John McClellan are shown attending the 2nd Trustee District Meeting. Doctor McClellan, Henderson, is alternate Trustee.

Albert N. Joslin, M.D., KMA Trustee of the 2nd District presides over the District meeting on June 24, 1986.

John D. Noonan, M.D., 1st District Trustee, presides over the meeting which was held on June 25, 1986.

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Trends Committee Meets to Develop Information Bank

Nelson B. Rue, M.D., (head of table) Chairman of the KMA Trends Committee presides over the June 25th meeting.

On June 25, 1986, the Committee to Investigate Changing Trends in Medicine met with Judah L. Skolnick, M.D., and Wendell Tyson, M.D., who shared their experience in setting up a mechanism which allowed them and their colleagues to be in a position to appropriately negotiate with any number of organizations seeking to contract for the delivery of medical services.

The Committee plans to develop an information bank of consultants who have had experience with alternate delivery systems. Access to that information would be made available to members, county medical societies and hospital staffs who are considering establishing an alternative payment system or who have been asked to contract with such an organization. Efforts to develop the information bank are now underway.

From left to right: Dwight L. Blackburn, M.D., Louisville; Jerry N. Clanton, M.D., Louisville; C. Dale Goodin, M.D., Versailles; and Gary Wallace, M.D., Lexington

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PLI Committee Finalizes Recommendations

Carl Cooper Jr., M.D., Chairman (head of table) along with members of the committee.

The KMA ad hoc Committee on Professional Liability Insurance met on June 26, 1986, to review and finalize recommendations to the KMA Board of Trustees. The ad hoc Committee is composed of members of the KMA Board of Trustees, Kentucky Medical Insurance Company and representatives from 22 specialty groups and the KMA Resident Physician Section. The Executive Committee of KMA forwarded the report to the Board of Trustees which acted on the provision at its August 6-7 quarterly meeting. The report will outline a proposed plan of action to enact tort reform in Kentucky during the 1988 Session of the Kentucky General Assembly.

AKMA Holds Interviews for Health Careers Loan

The Auxiliary to the Kentucky Medical Association Health Careers Loan Fund Committee met on June 3 for the purpose of interviewing applicants for the 1986–87 school year. During the past 35 years, the AKMA has awarded a total of $85,421.00 to 83 Kentucky students to assist them in completing their health related educations. Joan Klompus, Madisonville, chairs this committee. Other members are Phyllis Cronin, AKMA President; Pam Potter, President-Elect; Ellen Sklar, Finance Chairman; and Betty Schrodt, Loan Fund Treasurer.

Phyllis Cronin, Lexington, AKMA President

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RKMSF Celebrates 40th Anniversary

Henry S. Spalding, M.D., Bardstown, receives congratulations for his five years as Chairman of the RKMSF.

On May 15, 1986, the Rural Kentucky Medical Scholarship Fund celebrated its 40th anniversary as the oldest and most successful program of its kind in the nation. The Fund was developed jointly by the KMA and the University of Louisville School of Medicine for the purpose of supplying physicians to the rural areas of Kentucky.

During the meeting, Henry S. Spalding, M.D., Bardstown, stepped down as Chairman, a position he held since 1981. Taking his place is Carolyn McKinley, M.D., a Glasgow pediatrician.

Applications for RKMSF loans are accepted after January 1st each year. Contact the KMA for details.

Back row, left to right: John W. Koon, Treasurer RKMSF, member 14 years; Henry S. Spalding, M.D., member 18 years; Roy K. Jarecky, Ed. D., University of Kentucky, member 24 years; John Meisenheimer, Ph.D., Eastern Kentucky University, member 17 years. Front row, left to right: Bobbie Grogan, Frankfort, former Executive Secretary, member 28 years; Mrs. John Kirksey, Paducah, member 36 years; Gilbert L. Armstrong, Louisville, former Executive Secretary, member 21 years.

McDowell House

The Kentucky Medical Association
cordially invites you to attend the

Ephraim McDowell-Jane Todd Crawford Benefit Ball

and Reception honoring
KMA President-Elect, Richard F. Hench, M.D.
AKMA President, Mrs. John D. Cronin

on Sunday, September 21, 1986
Hilton East, Embassy Ballroom
Louisville, Kentucky

Black Tie
$125.00 per couple

Reception/cash bar 6:30 p.m., EDT
Dinner 7:30 p.m., EDT

R.S.V.P.

You should soon be receiving your personal invitation to the second annual Ball and Reception. If you do not and are interested in attending, contact:

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The deadline for reservations is September 12, 1986.

1986 KMA Annual Meeting Will Honor Past President

CHARLES ZACHARY AUD, M.D. (1846–1924)

CHARLES Z. AUD
1906

At the Annual Meeting of the Kentucky Medical Association held in early October 1906, at Owensboro, the members elected a native son of Daviess County to serve them as president for the coming year. He was Charles Zachary Aud, M.D., known to his colleagues as "C.Z."

Doctor Aud was born 13 April 1846 in Knottsville, Daviess County, Kentucky, the son of Thomas C. Aud, M.D. He received his early education in the local schools, attended St. Mary's College in Marion County and completed his undergraduate studies at Notre Dame University. He attended the Medical Department of the University of Louisville, receiving his M.D. in 1868, the same year he received his baccalaureate degree from Notre Dame. Aud also attended medical lectures at Bellevue Hospital Medical College in New York, from which he received another M.D. degree in 1871.

Returning to Kentucky, he obtained an appointment as surgeon for the Illinois Central Railroad, which was then building a line through Hardin County. He was sent to Cecilia by the railroad and there he remained for nearly 50 years as a private practitioner and railroad surgeon. He is said to have been the first resident of Cecilia.

After establishing himself in Cecilia, he married Lura Bayne. They had two sons and three daughters. One son, Charles A. Aud, became a dentist. Son, Francis Guy Aud graduated in medicine, trained in surgery and, like his father, served the KMA as its president (1947). The daughters were Generose (Mrs. Frank L. Habich), Mrs. R. H. Nusz, and Nancy "Nannie" Aud.

While carrying on his busy practice, he served for 25 years as Councilor for the Fifth District of the KMA. He was Hardin County Health Officer for 28 years and a member of the State Board of Health for 18 years. In addition to these services to medicine and his community, he was president of the State Bank of Cecilia and a director of the Union Bank and Trust Company of Elizabethtown.

Doctor Aud for many years was associated with J. N. McCormack, M.D., in both the State Board of Health and the KMA. From 1905–1908, Doctors C. Z. Aud, J. N. McCormack (KMA President 1884) and W. W. Richmond (KMA President 1903) served as the committee of the KMA which effected the consolidation of all five medical schools in Louisville as the Medical Department of the University of Louisville. Through the foresight and persistence of these three physicians, the proprietary medical schools were abolished and medical education was securely and properly established as part of a university. This was an important and long-sought step in improving the quality of medical education in our state.

Doctor Aud is said to have served his patients with diligence and compassion and his colleagues with unselfish devotion. He died at the home of his son, Guy, in Louisville, Tuesday, 15 July 1924.

Eugene H. Conner, M.D.

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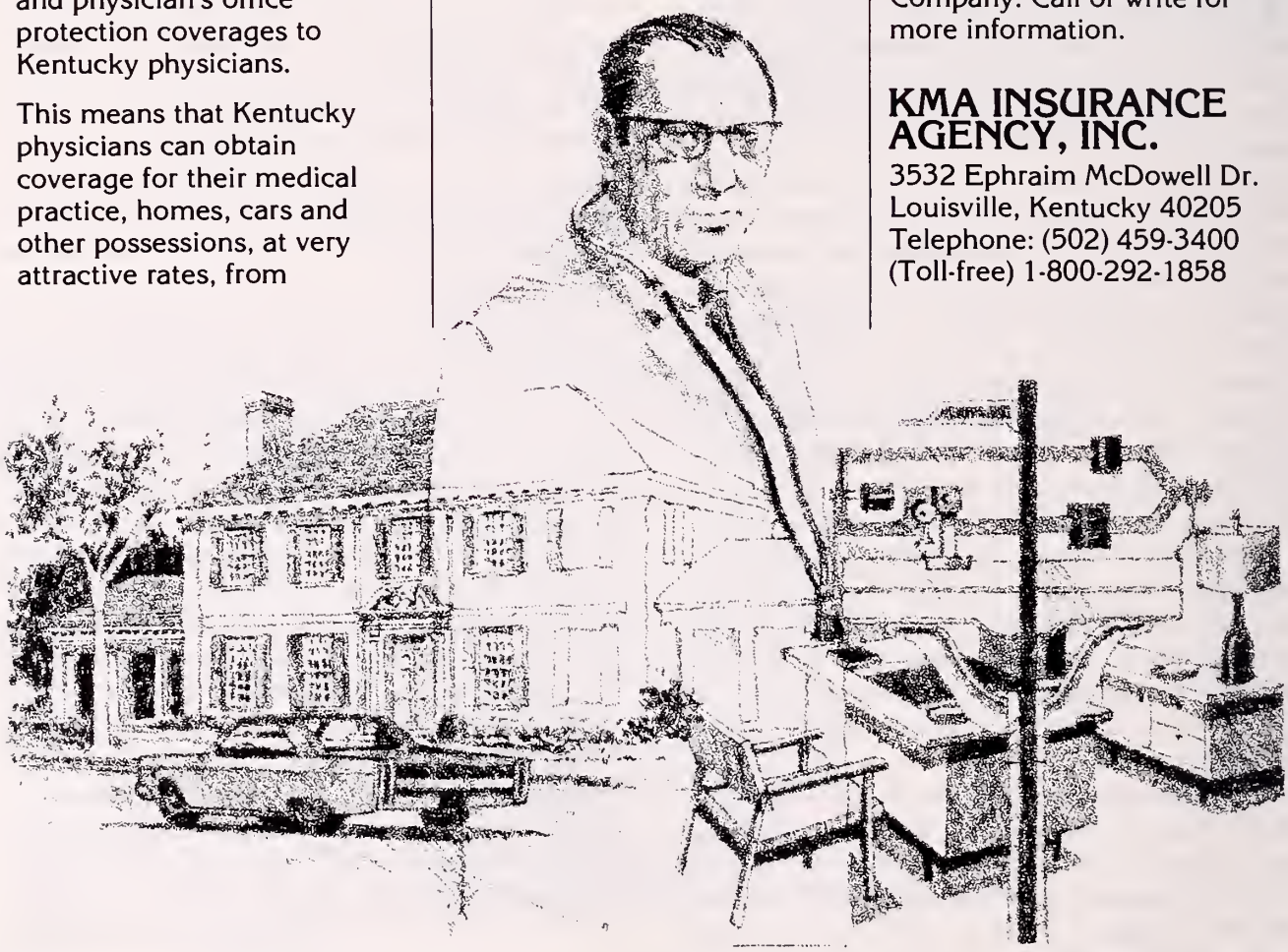

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The KMA Hospital Medical Staff Section will hold its annual meeting at the Bluegrass Convention Center on Saturday, September 20, 1986, in Meeting Rooms B, C, and D, beginning at 12:00 noon and concluding at 5:00 p.m., EDT.

The program will highlight developments in the areas of:

- Quality Assurance and Risk Management—Gale Morgan-Williams, Assistant to the Vice President of the Joint Commission on Accreditation of Hospitals, will present an update on JCAH plans, programs and goals regarding risk management in the hospital setting.
- Recent change from KPRO to a for-profit PRO based in Indiana
- Review of protocols and procedures dealing with Organ Transplants
- An overview of provisions in the recent Budget Reconciliation Act (COBRA) which affect hospital medical staffs
- Kentucky Board of Medical Licensure's requirements specifically related to conduct as a medical staff member.
- Panel discussion and question-and-answer period

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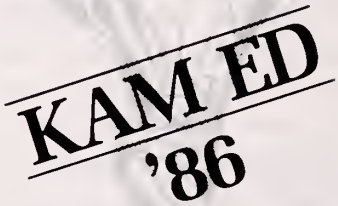

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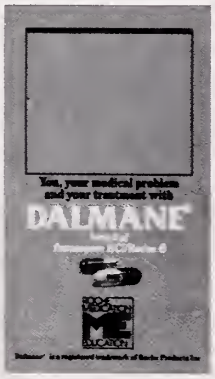

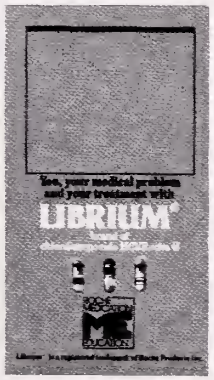

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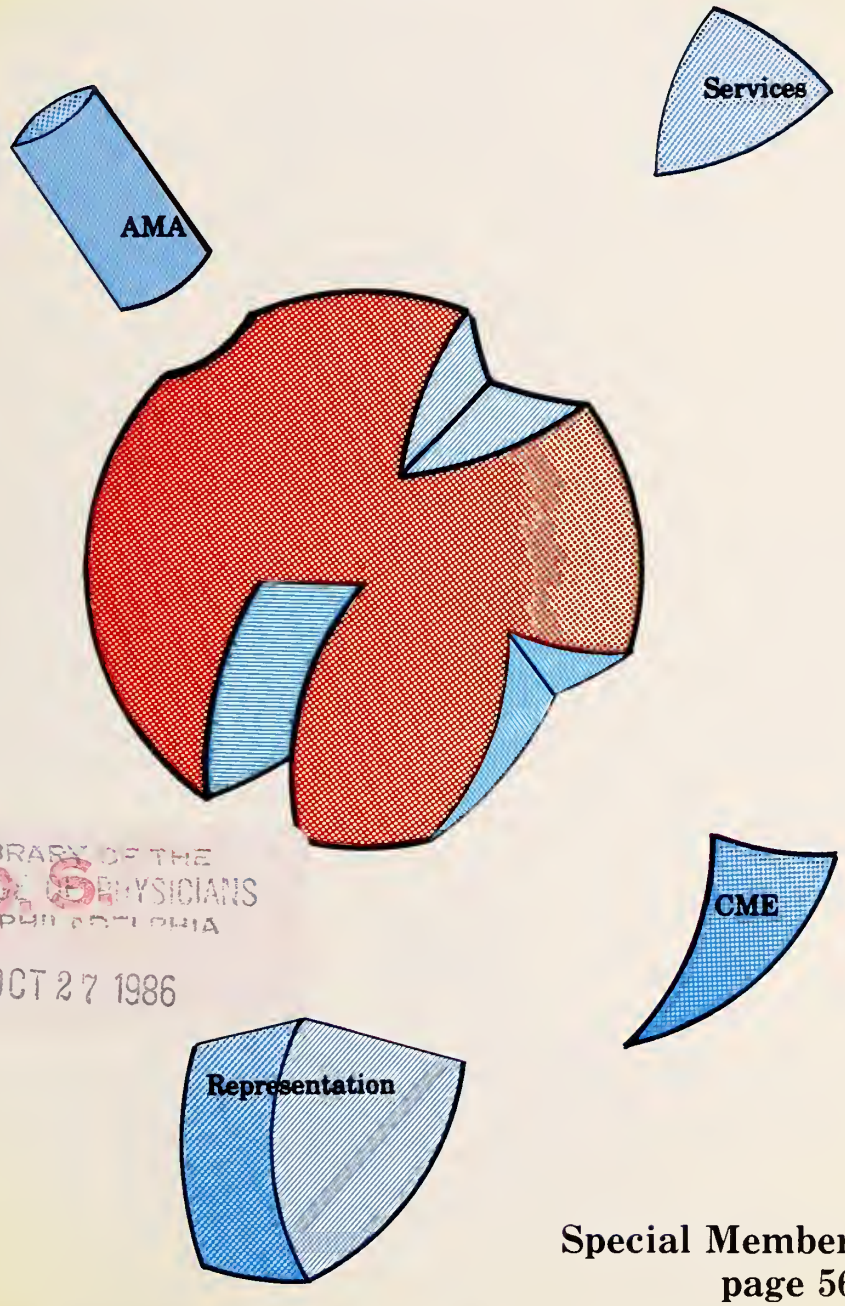

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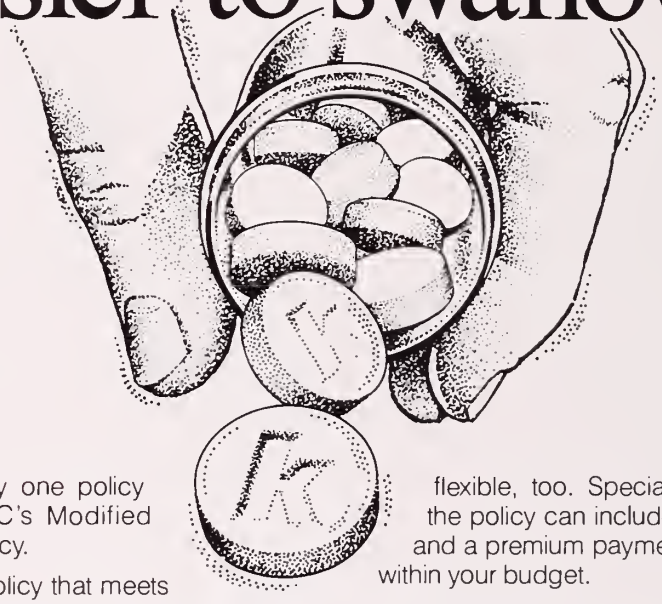

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Membership - Lifeblood

Membership and participation are the lifeblood of every organization, and it seems to me that medicine is in serious need of a transfusion.

Before addressing this problem, I would like to first thank the members of the Kentucky Medical Association for the honor of electing me President. To be so honored by my peers makes me both grateful for the compliment and apprehensive about the obligations and responsibilities. Thank you, and I promise my best efforts.

Those of you who read this page already know the importance of a strong unified voice in medicine. If we are to preserve what is best in medicine and withstand the winds of politics, alternative delivery systems, increased competition, professional liability, care of the indigent, and the increasing financial pressure on quality of care, then we must mobilize our greatest resource for this struggle - the physician.

How do we convince our nonmember colleagues not only of this fact, but more importantly and more difficult, how do we motivate them to put their money and their time into our organization?

Harold Haller, M.D., with the help of Bill Applegate and Diane Maxey, mounted an intensive membership drive of mailings, follow-up telephone calls, personal contacts, meetings, incentives, *etc*, which helped considerably. Their efforts were recently summarized in a six page report to the KMA Executive Committee. The drive was well-organized, well-managed, and well-done, but it is not enough. Today there are still 1,921 Kentucky physicians eligible for active membership in the KMA who do not belong.

If we are to significantly increase our membership, I believe that it must be done by each member speaking personally to just one or two nonmembers and briefly telling them - "we are in a battle, we need you, you need us, how about it?" It is especially important that we make personal contact with our younger colleagues, some of whom do not appreciate the importance of a strong medical organization. Many younger physicians, and indeed some of our older colleagues, appear to have their main allegiance to various specialty or subspecialty groups. I believe these specialty groups are excellent for educational purposes, but I do not believe that a multitude of specialty groups working independently can provide the strong unified voice that is needed to speak for medicine as a whole.

A multitude of forces is being brought to bear on our profession. There is no doubt that we will be severely tested over the next few years. What happens over the next few years will, in all likelihood, shape medicine for the foreseeable future.

Membership and participation can and will make the difference. Each and every one of you will be sorely needed.

Richard F. Hench, M.D.
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Multiple Trichoepitheliomas Treated with the Carbon Dioxide Laser

JOSEPH W. BUECKER, M.D., STEPHEN A. ESTES, M.D. AND JAMES A. ZALLA, M.D.

A patient with multiple trichoepitheliomas was successfully treated with carbon dioxide (CO2) laser vaporization and currettement.

Trichoepithelioma[1,2,3,4] is a benign cutaneous neoplasm that may occur as a solitary lesion or may present with multiple lesions found on the trunk, scalp and central face. Patients with multiple trichoepitheliomas have an autosomal dominant pattern of inheritance. The tumors begin appearing in the second decade of life, usually in symmetrically distributed numbers with multiple lesions commonly appearing simultaneously. Their growth is slow, and these tumors only rarely ulcerate or invade deeply. They generally remain asymptomatic but may result in disfigurement or cause significant cosmetic difficulties. We report a case of multiple trichoepitheliomas treated with the CO^2 laser.

Case Report

A 26-year-old white male was referred to the laser unit for evaluation and treatment of trichoepitheliomas. His lesions first began appearing at age nine and they have progressively increased in size and number with time. His mother has a limited number of similar lesions involving the nasolabial folds. The patient had multiple lesions removed in the past by electrosurgery, scalpel excision and facial dermabrasion, but many of these have subsequently recurred and new lesions have continued to develop, albeit at a slower rate, as he has gotten older.

Clinical examination revealed multiple flesh colored, dome shaped nodules 2-7 mm. in size located on the perinasal cheeks and nasolabial folds, the forehead and eyelids. Additional lesions were present on the scalp, posterior neck and scattered over the upper back and shoulders.

Initially, lesions in a test area of the occipital scalp were treated by vaporization and currettement, and allowed to heal. After successful results were obtained with the test area, subsequent lesions were treated in regional areas utilizing local anesthesia with 1% xylocaine and epinephrine diluted to 1:200,000. The articulating CO^2 laser was used in a continuous mode with an unfocused 2 mm beam and a power setting of five watts. A series of slightly overlapping parallel linear passes were made until all visible tumor was removed by vaporization. The base of the laser wound was curretted to remove any residual pockets of tumor, and then a defocused beam was used to achieve hemostasis. Pre-treatment lesions and immediate post-vaporization wounds are shown here involving the mid face region (Fig. 1 & 2). Lesions in a test area involving the right nasolabial fold were vaporized but not curretted. This area subsequently developed some tumor regrowth (Fig. 3). All treated lesions were dressed post-operatively with a thin layer of betamethasone valerate ointment and Vigilon dressing. The patient experienced little to no pain during the immediate post-surgery period. Routine wound care consisted of daily cleansings with hydrogen peroxide followed by application of Polysporin ointment and gauze dressing. Re-epithelialization occurred over a three week period. Follow-up to 10 months showed an acceptable cosmetic appearance except for the test area of the right nasolabial fold, with treatment ongoing. No areas treated with vaporization and currettement of base have shown evidence of tumor recurrence over this follow up period.

Comment

The CO^2 laser emits an invisible beam in the far infrared portion of the electromagnetic spectrum. Operating in the defocused mode, it has been successfully utilized in the treatment of many cutaneous neoplasms.[5,6] Trichoepitheliomas appear amenable to CO^2 laser vaporization.[7,8] We elected to currette the base after vaporization in an attempt to completely eradicate all tumor cells and possibly prevent recurrences. The only area which has developed tumor recurrence to date

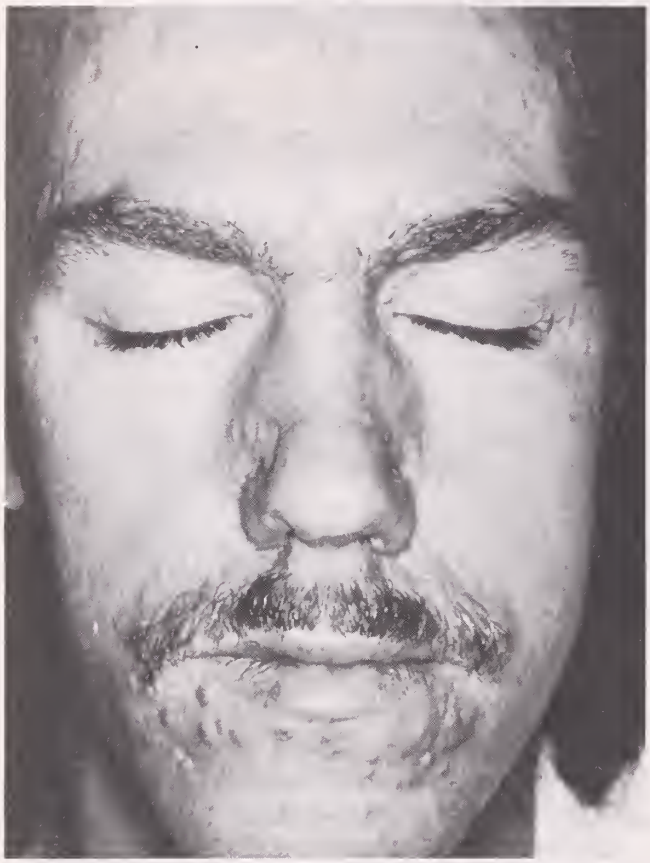

Fig. 1: Multiple facial trichoepitheliomas prior to laser surgery.

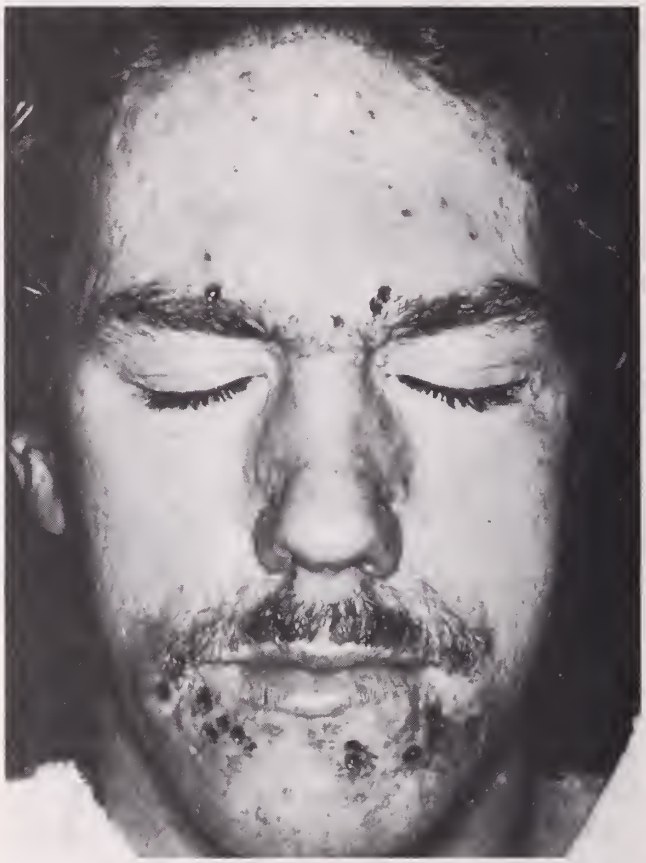

Fig. 2: Immediately after CO^2 laser vaporization and currettement.

was of the right nasolabial fold. The lesions in this area were vaporized but not curretted. The lack of currettement was the only apparent variable differing in the mode of treatment and wound care for lesions of the right nasolabial fold when compared with lesions of the left nasolabial fold, which have not recurred. The value of currettement with regards to rate of lesion recurrence demands longer follow-up.

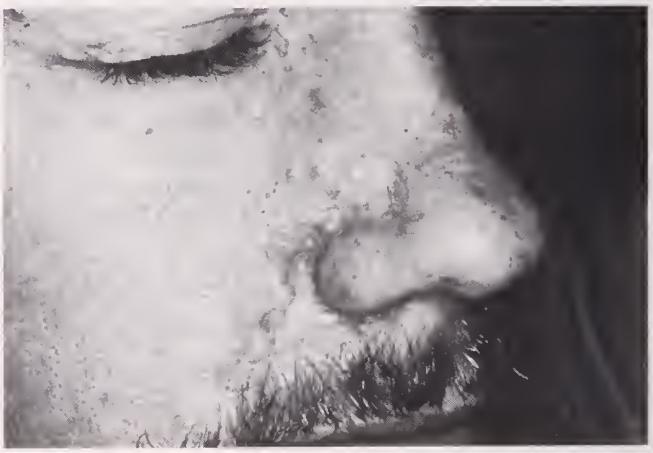

Fig. 3: Tumor recurrence of right nasolabial fold after CO^2 laser vaporization only.

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Surgical Treatment of Refractory Ventricular Arrhythmias: Initial Experience with Ventricular Resection Guided by Intraoperative Mapping

PRASAD R. PALAKURTHY, M.D., DAVID SLATER, M.D., ROBIN HOWE, M.D.
LAMAN GRAY, M.D. AND GURBACHAN SOHI, M.D.

New techniques have evolved in the past few years in the management of life threatening ventricular arrhythmias. Results of conventional aneurysmectomy are improved by intraoperative epicardial and endocardial mapping. Five patients with refractory ventricular tachycardias and/or fibrillation who were treated surgically by map guided ventricular resection are described. Four patients remained off of antiarrhythmic medications and were free of arrhythmia; one patient died in the postoperative period.

In spite of the development of many new antiarrhythmic drugs, recurrent, sustained ventricular tachycardia has become a challenging and frustrating therapeutic problem in a small but significant group of patients.[1,2] For these patients, the options are antitachycardia pacemakers, automatic implantable cardioverter-defibrillators and arrhythmia surgery. At this time, many types of antitachycardia pacemakers are being investigated. Their use is somewhat limited as they may cause acceleration of ventricular tachycardia and induction of ventricular fibrillation.[3,4] Recently automatic implantable defibrillators have been developed for patients with refractory arrhythmias to prevent sudden cardiac death.[5] However, patients may need to take antiarrhythmic drugs despite the implantable defibrillator. For patients in whom other treatments fail to control arrhythmia, surgery is a viable option. However, the results of routine ventricular aneurysmectomy with or without coronary artery bypass for cure of ventricular tachycardia have been disappointing.[6-8] The results of surgical therapy are improved significantly by the intraoperative epicardial and endocardial mapping.[9]

This report presents our initial experience with surgical treatment of ventricular tachycardia who were operated upon at the University of Louisville affiliated hospital, Humana Hospital University, during 1984 and 1985.

Methods

In this series, the five patients were selected from 100 patients who underwent intracardiac electrophysiologic studies at Humana Hospital University for recurrent ventricular tachycardia. All of these five patients had life threatening ventricular tachycardia and/or ventricular fibrillation and were placed on two or more antiarrhythmic agents (including experimental drugs in four patients). With the exception of one patient, they failed to respond to these drugs. Although one patient responded to amiodarone, this patient developed pulmonary toxicity from the drug and had recurrence of arrhythmia when the dose of amiodarone was decreased.

Of these five patients, three were men and two were women. Ages ranged from 54 to 67 yrs. (Mean 61 ± 4.3). Four patients had coronary artery disease with previous myocardial infarctions. Three of these patients had myocardial infarctions in the remote past, while one patient had mitral valve prolapse with severe mitral regurgitation. Clinical characteristics are shown in the table.

Diagnostic Studies

All of these five patients had undergone electrophysiological testing prior to surgery. Using percutaneous techniques, quadripolar, tripolar and bipolar catheters were introduced and fluoroscopically positioned in the high right atrium, adjacent to the bundle of His, and in the right and left ventricles. Programmed stimulation was used to initiate arrhythmias and standard electrophysiological protocol was followed. Programmed ventricular stimulation was performed with one to three premature stimuli delivered at the right

CHARACTERISTICS OF PATIENTS WHO UNDERWENT SURGERY AND THE RESULTS

Age Sex (Yrs)	Clinical History	Antiarrhythmic Drugs Tried	Type of Arrhythmia	Left Ventricu-lography/Coronary Arteriography	Type of Surgery	Clinical Outcome	Followup Period (Months)
61 M	Previous H/O, myocardial infarction. Presented with dizziness and chest pain.	P,Q,B,L,A —	Recurrent VT	LV aneurysm, involving anteriolateral, apical and infero-apical walls. LAD-total, CX-70%	Endocardial resection, aneurysmectomy. Permanent AV sequesential pacemaker	Off antiarrhythmic drugs. Free of arrhythmia.	16
62 F	Myocardial Infarction in Nov. 1983, Multiple syncopal episodes.	P,C,D,Q	Recurrent VT/VF	LV aneurysm, total LAD occlusion.	Endocardial resection.	Free of arrhythmia on no antiarrhythmic drug.	15
60 M	Myocardial infarction Oct. 1984. Recurrent VT.	P,Q	Recurrent VT	LV aneurysm, total LAD	Endocardial resection.	Free of arrhythmia on no antiarrhythmic drug.	14
67 F	Mitral valve prolapse, severe MR with congestive heart failure and atrial and ventricular arrhymias.	P,Q,M,A	Recurrent VT	Severe mitral regurgitation, no coronary artery disease.	Mitral valve replacement with excision of papillary muscles.	Died on 4th postop day with cardiogenic shock.	
55 M	Previous myocardial infarction.	P,Q,A	Recurrent VT	Akinetic anterolateral wall, LAD total.	Endocardial resection and single vesel bypass.	Free of arrhthmia	4

ventricular apex and in left ventricle if needed, at basic cycle lengths of sinus, 600, 500 and 400 msec. The QRS morphology, axis and rate of tachycardias induced were compared with previously documented tachycardias to ensure that they had been reproduced. Two or three intravenous drugs were administered in an attempt to assess their effect on tachycardia. Detailed endocardial mapping was tried to localize the earliest endocardial activation in patients who were hemodynamically stable.

Criteria for Surgery

Of all 100 patients, four were considered for surgery because of their failure to respond to antiarrhythmic drugs. Although one patient responded initially, the arrhythmia recurred when the dosage was decreased, and the left ventricular anatomy of this patient was thought suitable for surgical resection.

Intraoperative Mapping

After cannulation for cardiopulmonary bypass, reference electrodes were positioned on both ventricles. Ventricular tachycardia was initiated by programed stimulation, and bipolar electrograms were recorded from the epicardium of both ventricles with a fingertip electrode probe. After completion of epicardial mapping, cardiopulmonary bypass was initiated and ventricular aneurysm (three patients), akinetic area (one patient) and left atrium (one patient) were incised. Endocardial mapping was performed with particular attention to margins of the aneurysm. In four patients, ventricular tachycardia was initiated. It was nonsustained in three patients. In the patient with mitral valve prolapse and regurgitation, ventricular tachycardia could not be initiated. The mapping and reference electrograms were displayed simultaneously with three electrocardiographic leads at paper speeds of 150 msec. The intervals between each mapping electrogram and reference electrogram were scanned visually and measured by hand. The site where the earliest occurring electrogram was recorded was considered the origin of tachycardia.

ANTIARRHYTHMIC DRUGS
A - Amiodarone
B - Bretylium
C - Cibenzoline
D - Disopyremide
M - Mexiletine
P - Procainamide
Q - Quinidine

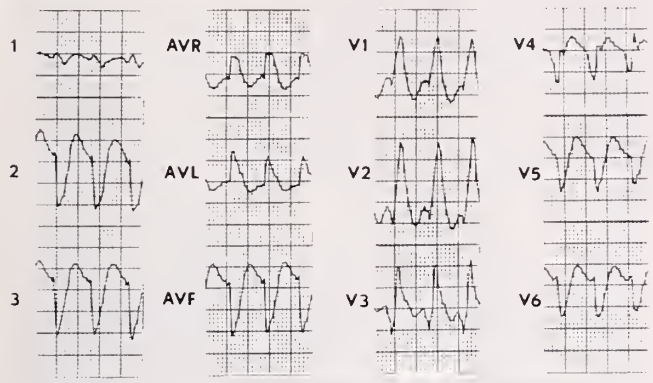

Fig. 1: 12-lead electrocardiogram recorded during ventricular tachycardia.

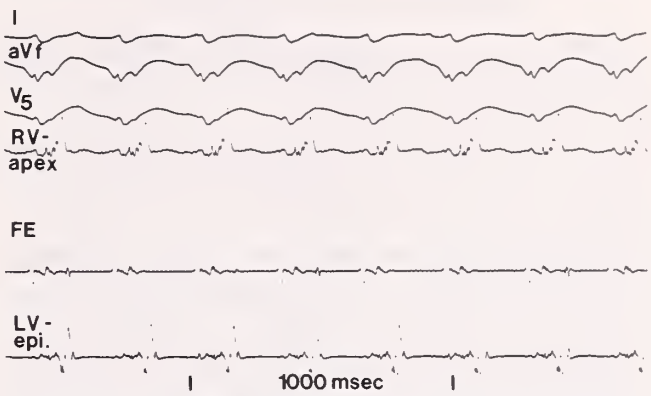

Fig. 2: Intraoperative mapping ventricular tachycardia is induced by programmed ventricular stimulation. Detailed mapping is done using a finger electrode.
Lead I, aVF, V_5
RV apex: Right ventricular apex
FE: Finger electrode
LVEP: Left ventricular epicardium (Reference electrode)

Operative Procedure

After identification of the site of tachycardia, the heart was cooled and cardioplegia solution was infused. In three patients, endocardial resection was done along with aneurysmectomy. An endocardial layer 1 to 2 mm thick at the site of origin was resected in the area of the earliest recorded electrogram. In one patient without a discrete aneurysm, the infarcted akinetic area was excised. In the other patient mitral valve replacement was done along with excision of the base of the papillary muscle, which was thought to be the site of origin of the tachycardia. Only one patient had a single vessel coronary artery bypass using the saphenous vein. One patient had additional placement of dual-chamber pacemaker (Cordis, Gemini theta) as he had preoperative bradycardia.

Postoperative Evaluation

Three patients were restudied postoperatively by programmed ventricular stimulation. Of these, one patient was studied noninvasively using his permanent pacemaker (Cordis, Gemini). This pacemaker can be programmed noninvasively to follow the stimulation protocol. These patients did not have inducible tachycardia.

Followup

The patient who had mitral valve replacement died on the fourth postoperative day. She had progressive respiratory difficulty. Death was due to hypotension not responding to fluids and inotropic agents and was thought to be secondary to cardiac failure. Autopsy did not reveal any new myocardial infarction. The other four patients remained free of ventricular tachycardia over a period of four to 16 months (mean 12.3 ± 5.6 mos).

Discussion

Intraoperative epicardial and endocardial mappings have improved surgical results of ventricular resection for refractory ventricular arrhythmias. Horowitz *et al* reported the results in 30 consecutive patients who underwent surgery guided by intraoperative mapping.[9] Complete resection of the site was possible in 27 patients, and partial resection in three. There were two operative and three nonarrhythmic deaths. None of the 25 surviving patients have had ventricular tachycardia during follow-up of four to 28 months. Three patients who had incomplete resections have required antiarrhythmic drugs. Mason *et al* compared blind aneurysmectomy with that of endocardial resection guided by intraoperative mapping.[10] In 32 patients with well documented ventricular tachyarrhythmias who had undergone blind aneurysmectomy, there was an arrhythmia recurrence rate of 50 ± 9 percent (mean $\pm$ 1 SEM) during the postoperative hospitalization. In contrast, after 10 months, only 11% of 18 patients who underwent myocardial resection guided by intraoperative mapping experienced recurrance of arrhythmia. Although our series is small, four patients with life-threatening ventricular arrhythmias remained free of arrhythmias during the follow-up period and did not require any antiarrhthmic medications.

Limitations of the Technique

There are certain limitations to this technique, and the main one is noninducibility of the tachycardia in the operating room. Many factors necessary for the induction of sustained reentry may be altered in the operating room, precluding the induction of tachycardia: anesthesia, decreased temperature of the myocardium on exposure to room air, change in the level of circulating catecholamines, ventricular volume and wall tension due to a change in preload or afterload and intraoperative trauma to the site of reentry by manipulation of the heart.[11] Occasionally the ventricular tachycardia induced will be extremely rapid, deteriorating into ventricular fibrillation. Sometimes ventricular tachycadia cannot be readily induced and more aggressive pacing techniques may result in nonclinical tachycardia.

In conclusion, intraoperative mapping is a useful technique and helps in identification and resection of arrhythmogenic focus, thus resulting in successful outcome.

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Hearing Aids for Adults: A Primer for the Physician

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Census Bureau data reveal that the number of aged citizens in the United States will double by the year 2020. Assuming a conservative prevalence rate of 29%, by the year 2020 there will be between 12 and 16 million hearing-impaired Americans over the age of 65. The authors contend that the physician in Internal Medicine or Family Practice will encounter a greater number of hearing-impaired adults in their practices in the future. This article presents an introduction and overview of considerations pertinent to hearing aid use in adults. The purpose of this paper is to give the physician basic information about, (1) candidacy for amplification, (2) the advantages and limitations of hearing aids, (3) aural rehabilitation and assistive listening devices, and (4) referral mechanisms and typical business practices of dispensers.

The population in the United States is aging rapidly. Census Bureau data from 1980 revealed 24 million persons in this country over the age of 65. The Bureau projects that by the year 2020, the number of aged citizens will have doubled. The greatest growth will occur in the years 2010 to 2020, when a 23% increase is predicted in the percentage of people over the age of 65.[1]

How will demographic trends affect the prevalence of age-related (presbycusic) hearing impairment among the elderly? Fein[2] reported that in 1981 the prevalence of hearing impairment was 29% in the noninstitutionalized elderly, and 40% in the nursing home population. Assuming that these rates prevail, by the year 2020 there will be between 12 and 16 million hearing-impaired Americans over the age of 65.

It should be made clear at the outset of this discussion that hearing loss is **not** confined to those adults who have reached the age of 65. Indeed, there is a steady decrease in hearing sensitivity and auditory discrimination (ability to understand speech) beginning in the third decade of life and continuing throughout adulthood. As Figure 1 depicts, age-related hearing deterioration is especially pronounced in the high frequency region of the audiogram for the "typical" patient.[3] It is the high frequency consonant sounds rather than the lower frequency vowel sounds, which contribute to speech understanding. The patient with a high frequency sensorineural hearing loss, therefore usually has difficulty understanding speech. This problem is exacerbated when the patient is listening to conversation in a background of interfering noise.

Based on demographic projections and on the high prevalence of hearing impairment in the aged population, it is the authors' contention that all physicians, but especially those in family practice and internal medicine, will come into more frequent contact with patients who have age-related hearing impairment. Many of these patients will seek advice about their hearing loss, and will question their personal physician regarding treatment options. It behooves the physician, therefore, to be cognizant of the general management of presbycusis, including the use of hearing aids. The purpose of this paper is to give the physician basic information about, (1) candidacy for amplification, (2) advantages and limitations of hearing aids, (3) aural rehabilitation and assistive listening devices, and (4) referral mechanisms and typical business practices of dispensers.

Candidacy for Amplification

A number of interacting factors determine whether or not a patient needs amplification. The authors have found that the absolute degree of hearing loss for pure tones (sinusoidal sound waves) is relatively less important than the patient's own perceived need for hearing help. The authors have worked with scores of mildly impaired adults (*ie*, 20 decibel average hearing loss at 500 Hertz, 1,000 Hertz and 2,000 Hertz) who both desired and required amplification. This phenomenon is better understood when other factors related to candidacy are considered. These include:

Shape or slope of the audiogram — Patients with good low frequency hearing but poor high frequency hearing will be aware of faint speech, but may not clearly

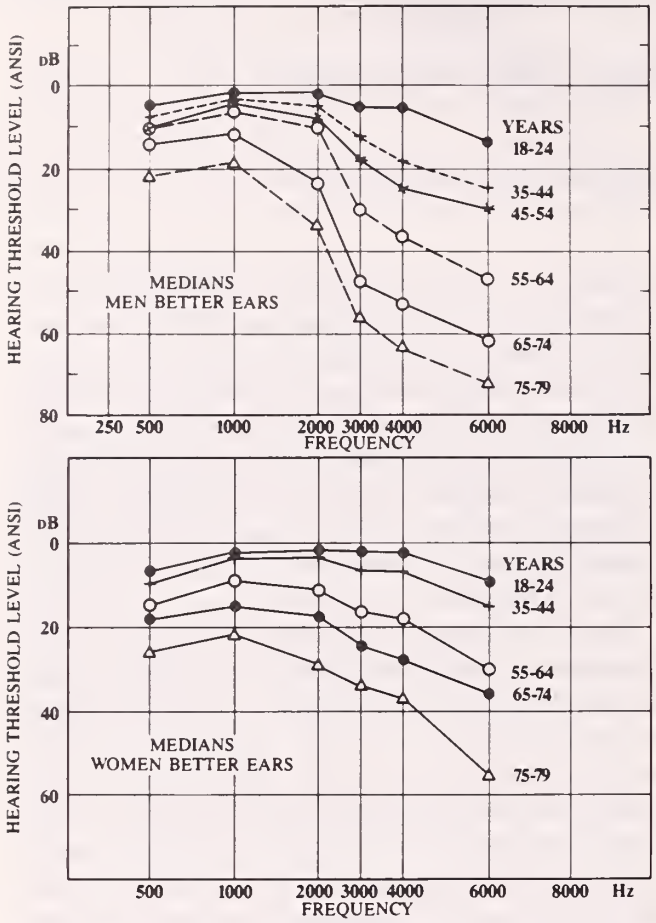

Fig. 1: Median hearing levels for the better ear in men and women by age group. Data derived from Public Health Service Publication, No. 1000. Series 11, No. 11, 1960-1962. Thresholds recalculated to ANSI reference level.

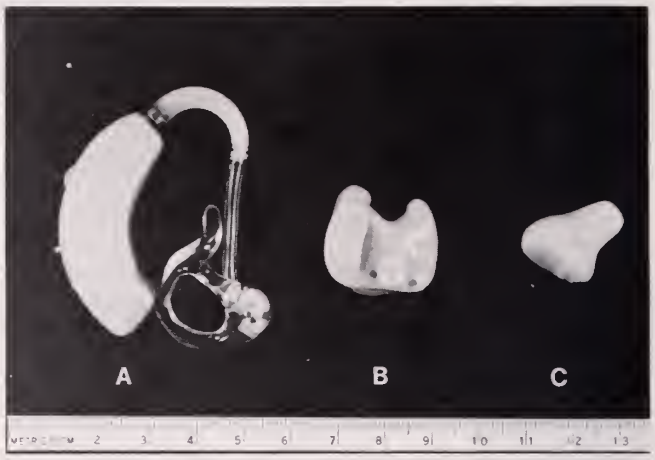

Fig. 2: Styles of hearing aids. (A) Over-the-ear type with lucite earmold. (B) In-the-ear aid. (C) Custom canal aid.

understand speech even at normal conversational levels. These patients are missing the important high frequency consonant sounds, (f, the, s, sh, v, ch, *etc*), which make speech intelligible. Generally, the more sloping the audiogram, the greater the patient's difficulty in understanding speech, and the greater the requirement for compensatory amplification.

Symmetry of hearing loss — Most age-related (presybcusic) hearing losses are bilaterally symmetrical. These losses are most easily improved with binaural (bilateral) hearing aids. Indeed, 85% of our hearing-impaired patients are fitted with biaural hearing aids.

Medical Contra-indications — The Food and Drug Administration (FDA) has published a list of "warning signs" which would **require** a dispenser to refer his patient for medical evaluation by a qualified physician. These include:

- Visible congenital or traumatic deformity of the ear
- History of active drainage from the ear within the previous 90 days
- Acute or chronic dizziness
- Unilateral hearing loss of recent onset within the previous 90 days
- Audiometric air-bone gap equal to or greater than 15 decibels (dB) at 500 Hertz (Hz), 1kHz and 2kHz
- Visible evidence of significant cerumen accumulation or a foreign body in the ear canal
- Pain or discomfort in the ear

Patients with any of these signs or symptoms may be fitted with hearing aids **only** after serious pathology has been ruled out, or medical-surgical treatment has been completed.

Demands placed on the hearing-impaired listener — As the patient's listening requirements increase, his need for, and success with amplification increase. Patients in competitive or demanding job situations perceive the need to have the best hearing possible. These are generally the best motivated hearing aid users.

Patient's age — The patient's chronological age, in and of itself, should never be a determining factor in hearing aid candidacy. Far more important is the patient's level of vitality and his enthusiasm for social intercourse. Typically, the patient with age-related, progressive hearing loss withdraws socially and becomes more isolated as time passes. The authors have witnessed dramatic reversals of this pattern in patients who accept and use their hearing aids regularly.

Physical limitations — The older adult may also suffer from limited vision, reduced manual dexterity,

memory loss, or other cognitive dysfunctions. The authors have found that it is prudent to eliminate, or at least reduce, the contribution of the patient's peripheral hearing loss to their overall condition whenever possible. A good deal of understanding and family support is necessary in these instances, but the benefits to the patient and to the family or nursing home staff are signficant.

Patient/family resources — A patient's financial situation can, unfortunately, influence the management plan for amplification. Some patients simply cannot afford two hearing aids despite their need for both. Others may feel that they cannot afford even one aid. Some patients "shop" for the lowest priced unit despite the fact that they require a high quality amplifier. These patients should be encouraged to inquire about time payment plans, insurance policy benefits, lower cost service options at university or hospital clinics, retired persons discounts through national organizations, (*ie*, American Association of Retired Persons, *etc*), hearing aid "banks" manned by volunteer professionals, or about the feasibility of using a reconditioned aid(s).

Advantages and Limitations of Hearing Aids

Hearing aid technology has made tremendous strides in the past five to 10 years. The most obvious advancements have occurred in size reduction. The integrated circuit, the micro-chip and smaller power sources have enabled the industry to build a unit which can fit discretely into the ear canal of many patients. These "canal aids," with their superior cosmetic appeal, have been made all the more popular in the past year by virtue of President Ronald Reagan's fitting. At present, approximately 60% of hearing aids sold are either "canal" aids or some type of "in the ear" (concha) aids. It should be understood that the use of these ultra-miniature devices is dependent upon the amount of amplification required and the size and shape of the patient's external auditory canal. An "in-the-ear" aid or a "behind the ear" aid will be required in those cases where the external auditory canal is small, or when a greater amount of amplification is required. See Figure 2.

A problem which routinely confronts hearing aid users is attempting to understand speech in environments where background noise exists. A similar problem occurs when the patient tries to follow conversation when several people are speaking at once. The hearing aid industry has been grappling with this dilemma for years. In an attempt to minimize this problem, background noise suppression circuits have been incorporated into many hearing aids. The design and function of these circuits are beyond the scope of this paper, and while these innovations, in our experience, have improved speech discrimination in noise, the problem has yet to be completely resolved.

Amplification for patients with sensorineural hearing losses can be complicated by a phenomenon known as recruitment. This is a hypersensitivity to loud sounds which may make amplified sound uncomfortable or distorted, and make the fitting of a hearing aid somewhat more challenging. In these cases we often employ an automatic **compression** circuit which instantaneously (~10 milliseconds) reduces the gain or output of the hearing aids when loud sounds occur in the listening environment. This technology has improved significantly the wearer's comfort and acceptance of amplification.

Nearly all of the scientific research conducted on the topic indicates that two hearing aids are better than one, especially in those patients who have bilaterally symmetrical hearing losses. The authors encourage these patients to try two aids. The binaural summation effect produces several advantages. These include: better speech discrimination in quiet environments, better discrimination in moderately noisy environments, improved auditory threshold, better sound localization, and improved sound quality. These advantages are substantiated by patients' subjective reports in our clinics.

In recent years audiologists and dispensers have come to appreciate the contribution that the earmold makes in determining the effectiveness of the amplification through a hearing aid. By manipulating the configuration, diameter, and size of the earmold one can alter the frequency response and output of the aid. This "fine tuning" process presents the patient with the highest possible sound quality and speech discrimination ability. Being the final common pathway to the tympanic membrane, the earmold may be the most critical element of the amplification system.

Aural Rehabilitation and Assistive Listening Devices

The hearing aid selection and fitting process is incomplete without an appropriate level of patient education, counseling and/or aural rehabilitation therapy. This process is dynamic; it must change to meet the specific needs of the patient. All patients require information concerning the operation and care of their aids. Some need help in coping with the psycho-social aspects of their sensory loss (*ie*, mild depression, anxiety, job-related stress). Others require a therapeutic

program consisting of listening exercises, speechreading training and/or compensatory communication strategies. It is essential that other family members be involved in this process to the extent possible. Indeed, the bulk of the rehabilitation effort is directed toward the family members in many cases. We endeavor to teach the family unit (or nursing home staff) how to facilitate communication with the hearing-impaired patient. Patients are encouraged to "manage" their own listening environment(s) by: (1) reducing as much background noise as possible, (2) confining important business conversations to quiet settings when possible, (3) rearranging home or office furniture to take the maximum advantage of lighting conditions, quiet spaces, and line-of-sight for speechreading, (4) installing noise-reducing carpeting, draperies, acoustically-treated ceiling tile, etc., to minimize acoustic reverberation, and (5) experimenting with new seating selection areas in church, the theater, or conference rooms.

In selected cases, the use of "assistive listening devices" (ALD's) are incorporated into the rehabilitation process. ALD's are amplifiers, which augment personal hearing aids, in a given listening environment. The following three examples illustrate how the use of ALD's may accomplish this:

PROBLEM #1 *Listening to television*: A patient wears binaural hearing aids but still has difficulty understanding T.V. programs because of background noise and reverberation in the room.

Solutions:

a. plug the aids directly into the audio output of the T.V. set
b. utilize an inexpensive earplug from T.V. to ear canal (includes a long extension cord)
c. utilize a wireless infra-red transmitter (mounted on T.V.) and receiver (worn as a headset)
d. utilize an induction loop transmitter which activates the telephone coil of the hearing aid

PROBLEM #2 *Telephone Listening*: The patient has difficulty following telephone conversations.

Solutions:

a. choose a hearing aid with a telephone pick-up induction coil switch
b. purchase a permanent or portable telephone amplifier
c. severely impaired patients may wish to connect the phone to a series of lamps throughout the house so that they can "see" the phone ring

PROBLEM #3 *Conferences/Meetings*: The patient has difficulty following group conversations around a conference table.

Solutions:

a. plug 2 external microphones directly into audio input of his personal hearing aids
b. utilize wireless Frequency Modulated (FM) transmitter from speaker's podium to FM receiver attached to hearing aids or worn as a headset

All of these ALD's improve the signal-to-noise ratio in the listening environment by reducing the talker-to-listener distance and/or reducing background noise interference. There are literally scores of ALD's with specific applications currently available on the market at reasonable prices.

Referral Mechanisms and Dispenser's Business Practices

The authors and the Food and Drug Administration strongly recommend that the hearing-impaired patient be seen initially by an otolaryngologist. In this way any treatable pathology can be addressed **before** the hearing aid selection and fitting process is undertaken. The FDA requires that children under the age of 18 years be referred to a certified audiologist for evaluation. Although not required, it is recommended that hearing-impaired adults also be evaluated by an audiologist who is certified by the American Speech-Language-Hearing Association. The audiologist may select, fit and sell the hearing aid(s) himself, or refer the patient to a licensed hearing aid dispenser. Hearing aids are also supplied by some hospitals, speech and hearing clinics, or university training programs. At least two major cities in Kentucky maintain a low cost "hearing aid bank" for indigent patients.

No matter what the source of the aid(s), the Federal Trade Commission (FTC) requires the dispenser to offer at least a 30-day trial period and the "right to cancel" the purchase agreement.[5] In the case of cancellation, the patient can recover nearly all of the purchase price, although the seller can retain the cost of batteries, earmolds and a small percentage of the purchase price for his time and materials. In-home sales of hearing aids can be accomplished only when the patient specifically invites the dispenser into the home.

The patient should know that hearing aid prices vary tremendously within their community. The authors have seen the same make and model of aid differ in price by as much as $300 among different dispensers. Never-

theless, the patient should be encouraged to base his decision not only on price but to consider the: (1) expertise and training of the dispenser, (2) availability of service, (3) availability of loaner instruments, *etc.*

The price of hearing aids can be an obstacle for some patients. The *Hearing Journal*[6] reported the average price of hearing aids sold in fiscal year 1984. In the Southeastern region of the country (including Kentucky), the average price for a single aid was $501.50 among "hearing aid specialists," $494 among "private practice/dispensing audiologists," and $451 among "audiologists." These figures are included here only as a general point of reference. Interestingly, the price of hearing aids has not kept abreast of inflationary trends. In real dollars the price of an aid is less than it was in the early 1970's.

Conclusion

The physician in internal medicine or family practice is likely to encounter a greater amount of hearing-impaired adult patients today than in the past. This article has presented an introduction and overview of considerations pertinent to hearing aid use in adults. Patients can now take advantage of a number of technological improvements, including "assistive listening devices," that offer improved cosmetic appeal, better comfort and sound quality. The patient is given adequate consumer protection by virtue of the FDA and FTC regulations pertaining to the sale and fitting of hearing aids.

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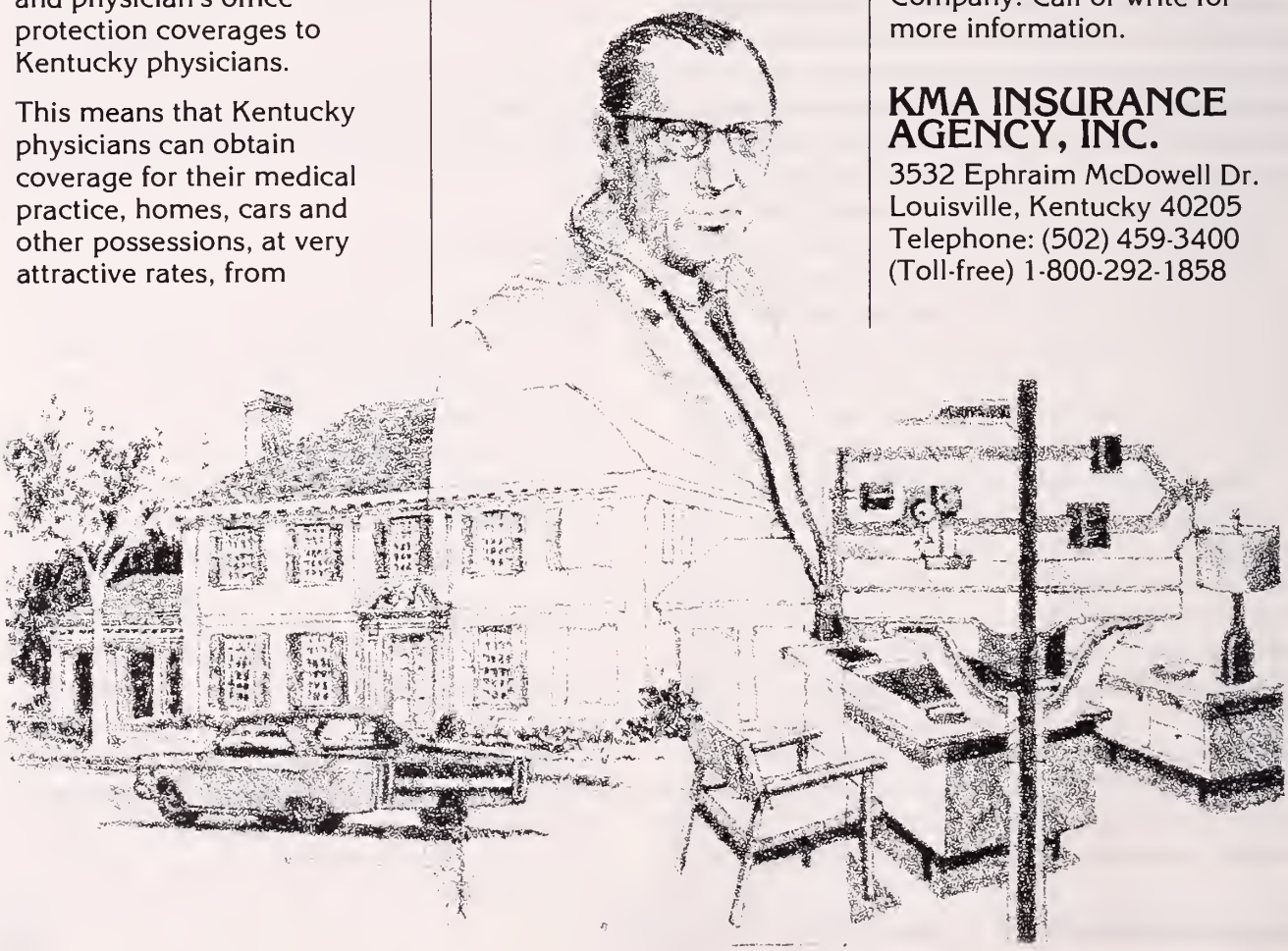

High Frequency Ventilation: Current Status

THOMAS M. ROY, M.D. AND H.L. SNIDER, M.D.

Although physicians have witnessed the effectiveness of positive pressure mechanical ventilators over the last 25 years, there can be little doubt that conventional mechanical ventilation (CMV) is far from the ideal form of life-saving ventilation. An optimal form of ventilation would provide adequate oxygenation and carbon dioxide elimination without harmful consequences to the lungs and other organ systems. We know that CMV has an overall incidence of barotrauma of 8%. This results largely from the high peak inspiratory pressure sometimes required to provide the tidal volumes of 10-15cc/kg to accomplish adequate alveolar ventilation at rates of 12 to 18 breaths per minute. In addition to barotrauma, high intrathoracic pressure swings have been shown to adversely affect venous return, cardiac output and intracranial pressures. There also remains a subset of critically ill patients that cannot be adequately oxygenated or ventilated by conventional methods. For these reasons, there has long been interest in alternative methods of respiratory support as evidenced by the enthusiasm afforded extracorporeal membrane oxygenators a decade ago. Today a similar wave of enthusiasm has been generated by techniques of high frequency ventilation that use respiratory rates that are at least four times the physiologic resting ventilatory rate. This umbrella term, high frequency ventilation (HFV), has been applied to several diverse methods of accomplishing ventilation with higher rates and small tidal volumes.

A current review of HFV is in order to provide the practicing clinician with some perspective of this method's current clinical role and its future potential.

The first form of HFV was reported in 1969 by Oberg and Sjostrand as a method of augmenting apneic diffusion in the dog.[1] They delivered extremely small tidal volumes at rates of 60 to 100 breaths per minute to the dogs in an attempt to minimize respiratory synchronous variations in blood pressure. They accomplished their goal and observed that oxygenation and ventilation was maintained near normal by this technique. They subsequently delivered the gas flow under pressure through a side port on an open tube in such a manner that air was not entrained through the main opening (Coanada effect). This afforded an avenue through which suction catheters or bronchoscopes could be passed without interfering with gas delivery. This form of HFV became known as high frequency positive pressure ventilation (HFPPV).

The second entry into the HFV arena was a technique developed by Lukenheimer in Germany in 1972 that encompassed the induction of oscillations in the column of gas in the airway of animals.[2] The application of intrathoracic pressure oscillations induced by tracheal vibrations at 20 to 40 Hz was accompanied by cessation of spontaneous ventilation, but oxygenation was achieved while carbon dioxide tension remained constant. This technique has come to be known as high frequency oscillation (HFO).

Although neither technique was initially developed expressly for clinical use, the successful maintenance of gas exchange encouraged investigators to apply these methods to clinical situations on a trial and error basis. Early success in maintaining reasonable gas exchange in humans was achieved, and high frequency ventilation became the subject of overwhelming interest.[3] The successful gas exchange provided by these methods could not be ignored, but, unfortunately, the actual physiology of what was occurring to promote gas exchange had not been fully elucidated.

As technology improved, a solenoid valve was introduced which allowed, in a controlled fashion, small volumes of pressurized gas to be forced through a small injector cannula with great velocity. This was termed high frequency jet ventilation (HFJV) and was an outgrowth of HFPPV. A high pressure source, 500 to 2000mmHg, is used to overcome the resistance of a narrow cannula and deliver short bursts (100-200msec) of gas into the airways. An electronic gating mechanism controls gas flow from the pressure source to the patient, accomplishing tidal volumes of only 3 to 5cc/kg. The peak inspiratory pressure (PIP) is a function of the flow rate and the driving pressure and is lower than the PIP's seen with conventional mechanical ventilation. The observation that the PIP's were lower with HFJV led clinicians to expect less barotrauma, less influence on cardiac output, and less effect on intracranial pressure with the newer technique.

Following the clinical use of HFJV by Klain and Smith in 1977,[4] this technique was widely received in spite of the lack of a totally acceptable physiologic explanation. Even today the full physiologic explanation for gas exchange by high frequency ventilation remains somewhat unclear, although a variety of plausible mathematical equations for tube models are available.

Conventional pulmonary physiology has not prepared us to understand HFV. In spontaneous breathing or conventional mechanical ventilation, bulk flow (convective flow) transports gas to and from the major airways. Turbulence and eddy development at bronchial bifurcations assist bulk flow in mixing and gas distribution at the segmental level. In the most distal portion of the tracheobronchial tree and at the respiratory exchange level, gas moves by molecular diffusion along partial pressure gradients. A portion of the gas volume introduced by conventional ventilatory modes will occupy areas of the trachea and bronchi that do not participate in gas exchange. This volume is referred to as the anatomic dead space. To accomplish adequate alveolar ventilation by conventional means, tidal volumes of 10 to 15cc/kg must be used.

In HFJV, there is less reliance on bulk flow and greater emphasis on the production of turbulent flow and facilitation of diffusion. This "augmented diffusion" has been shown to be the principal mechanism of gas transport during HFV. The degree of facilitation of diffusion in the airway is proportional to the velocity of the gas molecules, which, in turn, is determined by the ventilatory frequency. The pattern of gas flow, such as jet or oscillating, also influences diffusive transport. In HFJV, the instantaneously high initial inspiratory flow with a decelerating flow pattern is thought to provide more efficient intrapulmonary mixing than a conventional ventilator. Using the analysis of HFJV with present cylinder models, investigators have agreed that the augmented diffusion in the central airways, combined with molecular diffusion in the periphery of the lung can account for most of the observed gas transport during small tidal volume, high frequency ventilation.[5] The classic concept of anatomic dead space in the conducting airways is not as important in HFJV, since, in fact, the area plays an active part in the process of accelerated diffusion. The reduction of the effective dead space allows alveolar ventilation with smaller tidal volumes, *ie* 3 to 5cc/kg.

The strategy, then, for enhanced gas exchange is to generate high flow velocities with limited volume excursions. This is accomplished by using high respiratory rates with high gas flows. The lowered peak inspiratory pressures are a serendipitous, but a highly desirable, outcome of the mechanical factors used to generate the high flow velocities.[6]

High frequency jet ventilators are commercially available, and the FDA has approved them for clinical use with rates limited to 150 cycles/min (2.5 Hz). An endotracheal tube that contains a built in cannula injector was introduced in 1983 for use with the jet ventilator. Consequently, 90% of the HFV used in the adult intensive care unit and in surgery is the HFJV mode.

Clinical application of HFJV has been widespread and published reports document its utility in some well defined areas. Many thousand rigid bronchoscopies have been successfully performed in conjunction with HFJV. Nomograms for determining the rate, frequency, and drive pressures have been established based on the diameter of the bronchoscope to the injector cannula.

HFJV via an insufflation catheter passed into the trachea has been successfully used to provide adequate ventilation during resection or reconstruction surgery of the trachea and larynx. This technique is especially attractive since the anesthesiologist otherwise may limit the surgeon's easy access to the larynx.[7]

This mode of ventilation has also been well utilized for ventilating the patient with bronchopleural or tracheoesophageal fistula. The smaller tidal volumes used in HFJV appear to allow better ventilation, while avoiding large air flows through the fistula that might prevent healing.[8]

Some centers report large series of neurosurgical patients that have been maintained and weaned from HFJV, while recording less disturbances in intracranial pressure swings. In the future, this mode of ventilation may become the ventilatory mode of choice for certain neurosurgical procedures. Less intrathoracic pressure swings are transmitted to the brain, decreasing the subsequent movement of brain tissue that might interfere with delicate neurosurgical technique.[9]

There is presently a multicenter trial of HFJV in the support and treatment of infants with neonatal respiratory disease secondary to Hyaline Membrane disease. It is hoped that by avoiding the high PIP's required for conventional positive pressure ventilation, a reduction in all forms of barotrauma and in bronchopulmonary dysplasia may be accomplished.[4]

The use of HFJV in other areas has been less encouraging. The method has been well documented to provide adequate respiratory support, but its use has not been shown to improve survival. These clinical applications include the Adult Respiratory Distress Syndrome, chronic respiratory failure in COPD, and in the patient with necrotizing pneumonias.[10] Initial reports of less impairment in cardiac output with HFJV have not been consistently seen clinically.[11] Likewise, early reports of being able to oxygenate the patient with lower mean airway pressures have not been substantiated. In fact, it is now well accepted that the same degree of mean airway pressure is required by either CMV or HFJV to maintain the same degree of oxygenation.

The lack of evidence for improving survival in all but a few selected subsets of patients becomes even more important when the technical problems of HFJV are examined. The major problem that is still incompletely solved is that of humidification of the gas coming through the jet cannula. At the present time, this problem is addressed by dripping small beads of saline in front of the jet nozzle allowing nebulization of fluid into the airway. Understandably, this nebulization does not equate with humidification, and tracheal injury around the jet nozzle is probably a reflection of too dry gas. On the other hand, too vigorous nebulization may result in pooling of secretions and fluid overload.

Another problem that needs resolution is the inability to consistently heat the gas to the patient's body temperature. This constitutes an additional factor that may contribute to mucosal injury.[4]

The alarm systems for the high frequency jet ventilators are relatively new and untested over a wide clinical experience. Most clinicians who are familiar with mechanical ventilation consider the alarm and monitoring systems for HFJV to be in their infancy. Double or triple backup alarm systems are in use in most centers. The major improvements that need to be developed in this situation are reliable monitors for potential over-inflation associated with gas outflow obstruction and high pressure relief valves. The potential for inadvertent PEEP is very real.

Mechanical breakdown can occur secondary to overstress from the high frequencies. This potential danger requires back-up support by a conventional ventilator. In most centers, the HFJV system is mounted above the conventional ventilator which can also provide supplemental humidified gas which is entrained by the Venturi effect of the jet flow.[12]

What, then, is the present role of HFJV in the intensive care unit? In the critically ill patient, it has been established as a reliable, predictable, and effective means of providing oxygenation and carbon dioxide elimination comparable to spontaneous breathing or conventional mechanical ventilation. It has not, however, been shown to influence the prognosis or survival of seriously ill patients in large controlled studies.[5,10] This fact, when placed in the context of the unresolved technical problems and the lack of familiarity with the physiology involved, accentuate the comparable ease of conventional methods of mechanical ventilation and would seem to reasonably relegate HFJV to a position of alternative respiratory support. At the present time, our use of HFJV in the critically ill patient is largely confined to the patient who is not doing well on CMV.[13] This secondary role may well change as more studies are done and the equipment is refined, but seems to be in keeping with the experience of other medical centers.

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for healed duodenal ulcer patients

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In two randomized, double-blind, and well-controlled clinical trials, ZANTAC 150 mg h.s. significantly superior to cimetidine 400 mg h.s. for maintenance therapy in healed duodenal ulcers.

Percent of patients with observed duodenal ulcer recurrence

		0-4 months	0-8 months	0-12 months	No. patients
USA[1]	ranitidine 150 mg h.s.	9%	14%*	16%†	60
	cimetidine 400 mg h.s.	23%	34%	43%	66
UK, Ireland, Australia[2]	ranitidine 150 mg h.s.	8%‡	14%‡	23%‡	243
	cimetidine 400 mg h.s.	21%	34%	37%	241

*p=0.02
†p=0.01
‡p≤0.004
%=life-table estimates
All patients were permitted prn antacids for relief of pain.

These two trials used the currently recommended dosing regimen of cimetidine (400 mg h.s.) and ranitidine (150 mg h.s.). A comparison of other dosing regimens has not been studied.

The studied dosing regimens are not equivalent with respect to the degree and duration of acid suppression or suppression of nocturnal acid.

The superiority of ranitidine over cimetidine in these trials indicates that the dosing regimen currently recommended for cimetidine is less likely to be as successful in maintenance therapy.

Convenient once-a-night dose with a

low incidence of side effects[3]

Headache, sometimes severe, seems to be related to ranitidine administration. Other side effects have been reported; for a complete listing, see the **ADVERSE REACTIONS** section in the Brief Summary.

No significant interference with the hepatic cytochrome

P-450 enzyme system at recommended doses

ZANTAC 150 mg has no significant drug interactions with theophylline, phenytoin, or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH may be altered when ZANTAC or other medications that decrease gastric acidity are administered.

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One tablet at bedtime
for maintenance

See next page for references and
Brief Summary of Product Information.

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References:

1. Silvis SE, Griffin J, Hardin R, et al: Final report on the United States multicenter trial comparing ranitidine to cimetidine as maintenance therapy following healing of duodenal ulcer. *J Clin Gastroenterol* 1985;7(6):482-487.
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3. Data available on request, Glaxo Inc.

ZANTAC® 150 Tablets (ranitidine hydrochloride)
ZANTAC® 300 Tablets (ranitidine hydrochloride)

BRIEF SUMMARY OF PRODUCT INFORMATION

See complete product information before prescribing. The following is a brief summary

INDICATIONS AND USAGE: ZANTAC® is indicated in:
1. Short-term treatment of **active duodenal ulcer**. Most patients heal within four weeks.
2. **Maintenance therapy** for duodenal ulcer patients at reduced dosage after healing of acute ulcers.
3. The treatment of **pathological hypersecretory conditions** (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of **active, benign gastric ulcer**. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated.
5. Treatment of **gastroesophageal reflux disease (GERD)**. Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer, active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

CONTRAINDICATIONS: ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

PRECAUTIONS: General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy. 2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function. Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

Laboratory Tests: False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Drug Interactions: Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day.

Ranitidine was not mutagenic in standard bacterial tests (*Salmonella, E coli*) for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

Pregnancy: *Teratogenic Effects: Pregnancy Category B:* Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: ZANTAC is secreted in human milk. Caution should be exercised when ZANTAC is administered to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Use in Elderly Patients: Ulcer healing rates in elderly patients (65 to 82 years of age) were no different from those in younger age groups. The incidence rates for adverse events and laboratory abnormalities were also not different from those seen in other age groups.

ADVERSE REACTIONS: The following have been reported as events in clinical trials or in the routine management of patients treated with oral ZANTAC®. The relationship to ZANTAC therapy has been unclear in many cases. Headache, sometimes severe, seems to be related to ZANTAC administration.

Central Nervous System: Rarely, malaise, dizziness, somnolence, insomnia, and vertigo. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

Cardiovascular: Rare reports of tachycardia, bradycardia, and premature ventricular beats.

Gastrointestinal. Constipation, diarrhea, nausea-vomiting, and abdominal discomfort-pain.

Hepatic: In normal volunteers, SGPT values were increased to at least twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid IV for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

Musculoskeletal: Rare reports of arthralgias.

Hematologic: Rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Endocrine: Controlled studies in animals and man have shown no stimulation of any pituitary hormone by ZANTAC and no antiandrogenic activity, and cimetidine-induced gynecomastia and impotence in hypersecretory patients have resolved when ZANTAC has been substituted. However, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Integumental: Rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia.

Other: Rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

DOSAGE AND ADMINISTRATION: Active Duodenal Ulcer: The current recommended adult oral dosage is 150 mg twice daily. An alternate dosage of 300 mg once daily at bedtime can be used for patients in whom dosing convenience is important. The advantages of one treatment regimen compared to the other in a particular patient population have yet to be demonstrated.

Maintenance Therapy: The current recommended adult oral dosage is 150 mg at bedtime.

Pathological Hypersecretory Conditions (such as Zollinger-Ellison Syndrome): The current recommended adult oral dosage is 150 mg twice a day. In some patients it may be necessary to administer ZANTAC® 150-mg doses more frequently. Doses should be adjusted to individual patient needs, and should continue as long as clinically indicated. Doses up to 6 g/day have been employed in patients with severe disease.

Benign Gastric Ulcer: The current recommended adult oral dosage is 150 mg twice a day.

GERD: The current recommended adult oral dosage is 150 mg twice a day.

See full prescribing information for dosage adjustment for patients with impaired renal function.

HOW SUPPLIED: ZANTAC® 300 Tablets (ranitidine hydrochloride equivalent to 300 mg of ranitidine) are yellow, capsule-shaped tablets embossed with "ZANTAC 300" on one side and "Glaxo" on the other. They are available in bottles of 30 (NDC 0173-0393-40) and unit dose packs of 100 tablets (NDC 0173-0393-47).

ZANTAC® 150 Tablets (ranitidine hydrochloride equivalent to 150 mg of ranitidine) are white tablets embossed with "ZANTAC 150" on one side and "Glaxo" on the other. They are available in bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs of 100 tablets (NDC 0173-0344-47).

Store between 15° and 30°C (59° and 86°F) in a dry place. Protect from light. Replace cap securely after each opening.

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Representation: As your voice in Frankfort, KMA constantly studies and monitors state legislation that affects medical practice, teaching, research, and public health. In addition, KMA provides day-to-day liaison with various governmental and health planning agencies, third party payors, specialty societies and the media.

Education: The Association sponsors conferences throughout the year for continuing medical education in subjects of both a practical and scientific nature. A highlight of the year is the KMA Annual Meeting where scientific sessions, including meetings of more than 20 specialty groups, are featured. In addition, KMA sponsors seminars on emergency medical care, practice management and socioeconomic topics.

Information: *The Journal of KMA*, a monthly scientific publication, and the "Communicator," KMA's newsletter, keep you informed on current issues affecting medical practice.

Committees: More than 40 KMA committees meet throughout the year and address such matters as professional liability, indigent care, school health, child abuse, care of the elderly, physician manpower, and others. In addition, KMA established the Resident Physicians Section, the Medical Student Section, the Hospital Medical Staff Section and the Impaired Physicians Program to meet the special needs of its individual members.

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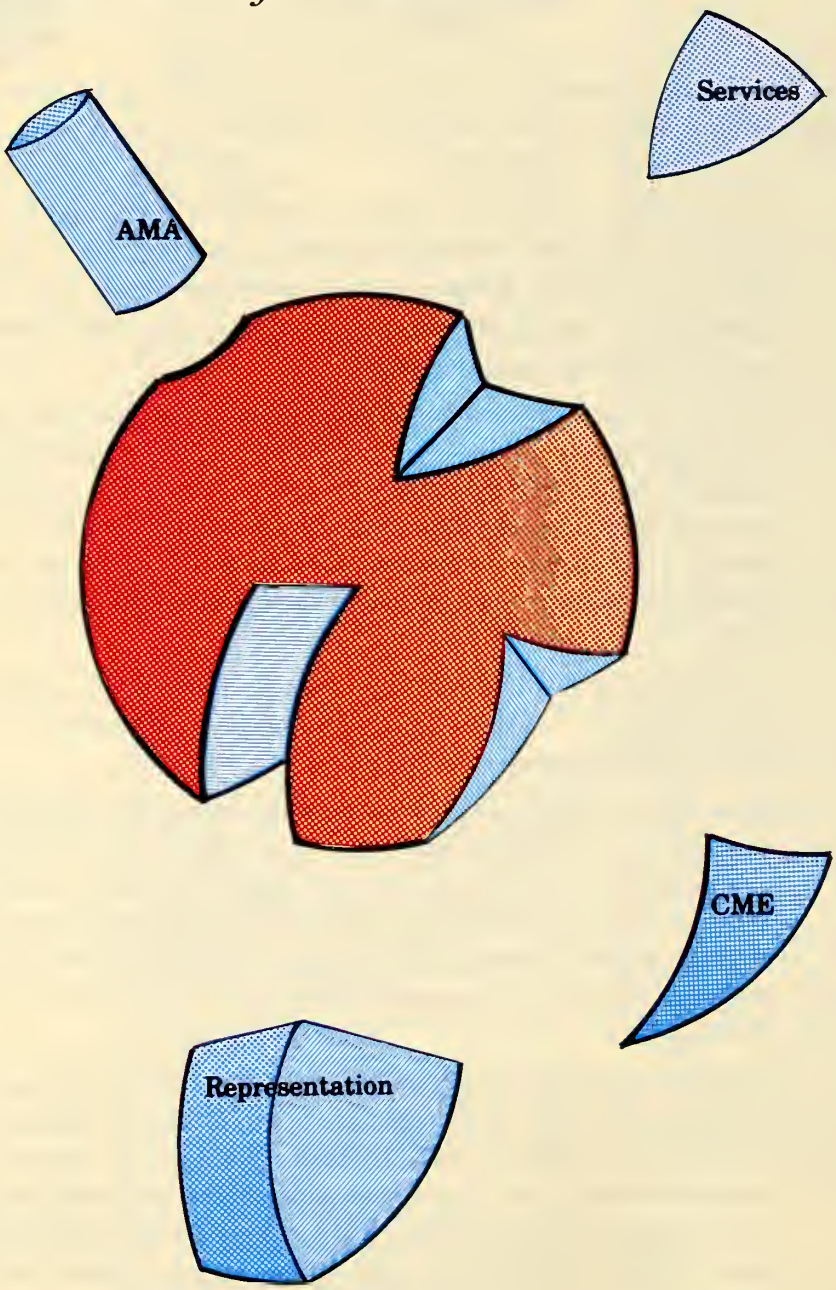
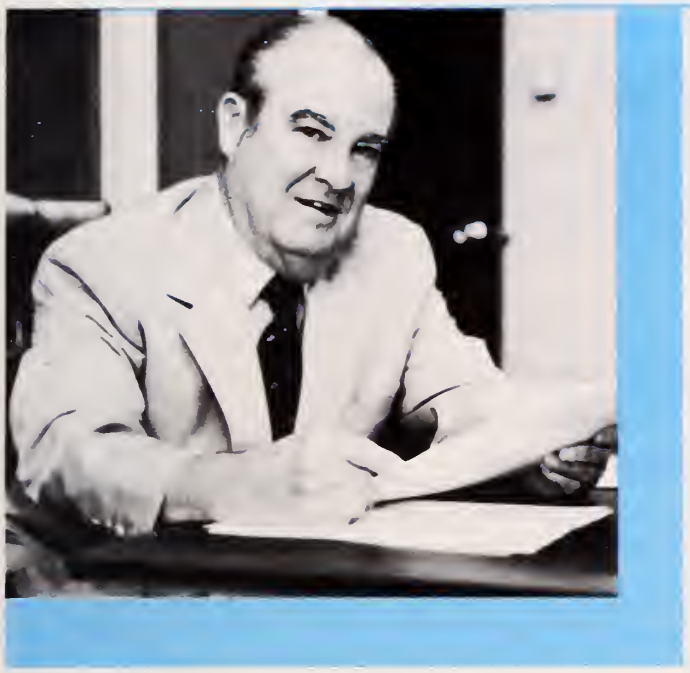
SPECIAL ISSUE

Membership in the federation not only meets the needs of ALL physicians — whether specialist or generalist, group or solo, male or female, young or old — but the federation needs the membership of ALL physicians. The following articles are a testament to the belief that by "Working together. . .we can strengthen the voice of medicine."





The Judicial Council's Role in Organized Medicine

Earl F. Oliver, M.D.

Historically the medical profession has long subscribed to a body of ethical statements developed principally for the benefit of the patient. As a member of this profession, a physician must recognize responsibility, not only to patients, but to society, to other health professionals, and to self. Ethical standards of professional conduct and responsibility may exceed but are never less than, nor contrary to, those required by law.

The earliest written code of principles for medical practice was conceived by the Babylonians around 2000 B.C. That document, the code of Hammurabi, was a code of conduct, setting forth in considerable detail for that era the nature of conduct demanded of the physician.

Later, The oath of Hippocrates, a brief statement of principles has come down through history as a living statement of ideals to be cherished by the physician. This oath was conceived sometime during the period of Grecian greatness, probably in the fifth century B.C. It protected rights of the patient and appealed to the inner and finer instincts of the physician without imposing sanctions or penalties on him. The Oath of Hippocrates was Christianized in the 10th or 11th century A.D. to eliminate reference to pagan gods; it has remained in Western Civilization as an expression of ideal conduct for the physician.

Subsequent to the Hippocratic oath, a significant contribution to medical ethical history was made by Thomas Percival, an English physician, philosopher and writer. In 1803, he published his "Code of Medical Ethics," which related to a scheme of professional conduct relative to hospitals and other charities.

At the first official meeting of the American Medical Association of Philadelphia in 1847, the two principal items of business were the establishment of a code of ethics and the creation of minimum requirements for medical education and training. It is clear that the AMA's first adopted Code of Ethics was based on Percival's code.

The Kentucky Medical Association subscribes to the above principles. The KMA's Judicial Council is composed of the Secretary-Treasurer of the Association and four members to be elected by the House of Delegates for terms of four years each. The terms are staggered so that one member is elected each year. The Council annually elects a chairman.

The Judicial Council is the Board of Censors of the Association; it is the final arbiter of all questions involving the rights and standing of members, whether in relation to other members, to the component societies, or to the Association. All charges of breach of medical ethics brought before the House of Delegates are referred to the Judicial Council. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of the Association, or the Principles of Ethics of the American Medical Association is liable to censure, fine, suspension, or expulsion upon order of the Judicial Council. If the Judicial Council is of the opinion that the offending member's license to practice medicine should be revoked, it shall be reported to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Medical Licensure. A decision of the Judicial Council is final; however, a party aggrieved by the decision of the Judicial Council may seek an appeal to the Judicial Council of the American Medical Association.

Complaints are received by the Judicial Council from physicians, medical groups or societies, patients, insurance companies, governmental bodies, and others. Every complaint is investigated as thoroughly as possible with the assistance of District Trustees, consultants from various medical and surgical specialities and legal consultants. Fair and equitable decisions made by the Judicial Council are made possible only with the cooperation and assistance of the members of organized medicine who donate their time and efforts freely and without compensation for the benefit of the patient and the members of the profession.

Governmental agencies now collect taxes for and provide payment for approximately 45% of all health care presently delivered in the United States. With the advent of aggressive intervention by the Federal Government into the delivery of health care, many changes have occurred. The time honored freedom of choice by both patient and physician have been compromised. In addition, other freedoms have been substantially altered: freedom for the patient, his family and the physician to together decide upon the place of and the course of treatment without interference from courts of law; and freedom for the patient and the physician to agree upon fair and equitable fees for service or to agree that the service shall be rendered without fee.

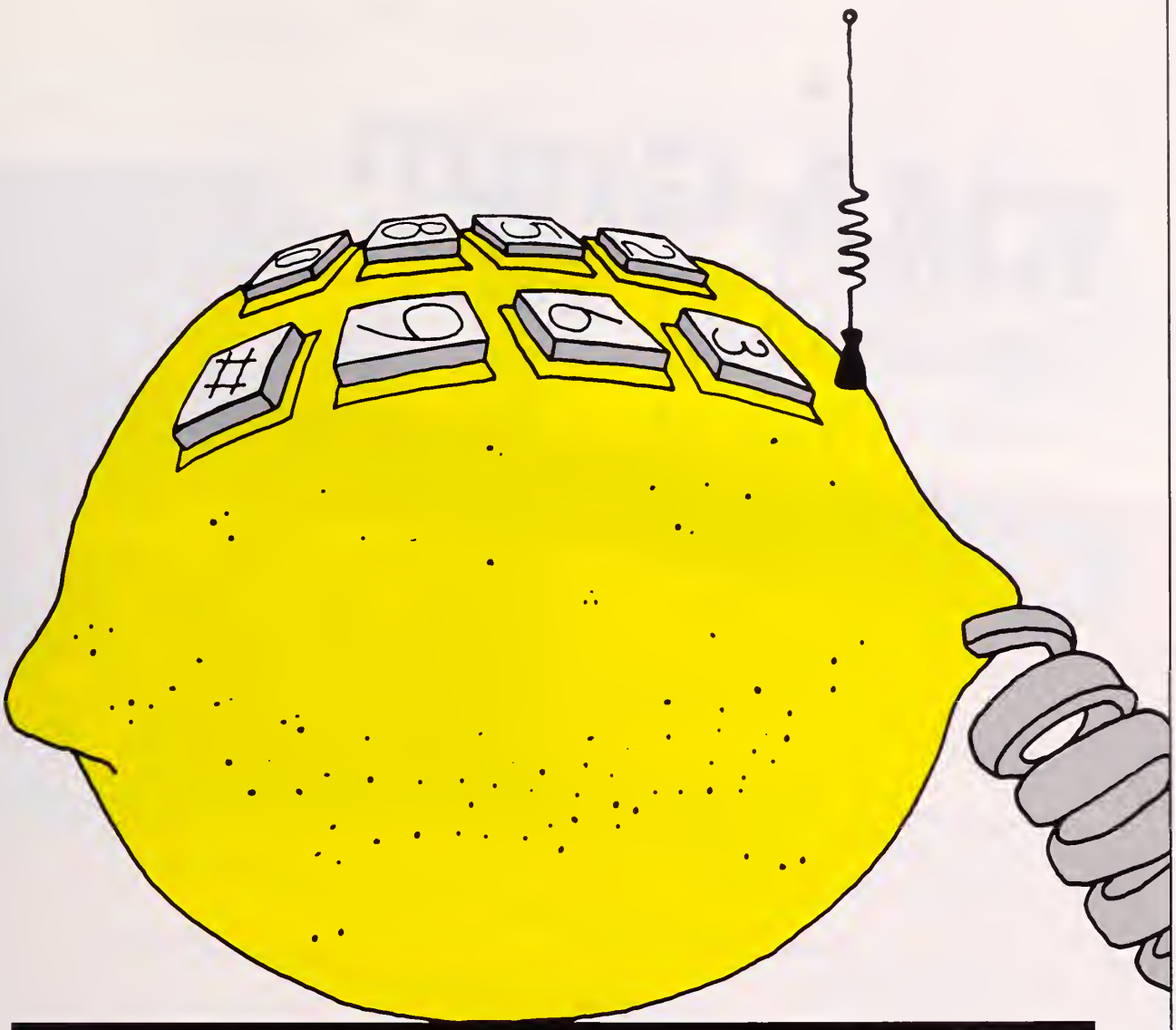
These last freedoms have been replaced by Federal regulations applying to almost 50% of health care services, laws which often lead to mounds of paper work, overutilization of health care by patients and physicians, DRG's, abuse of elderly in extended care facilities, denial of medical care by some providers and denial of payment for care by governmental and other third party payors, lowering of standards for admission to medical schools for certain applicants, and an unrealistic and mandatory definition of poverty by the various bureaucratic agencies.

These changes in health care delivery have definitely caused an increase in the cost of delivering medical care and a coexisting decrease in the overall quality of medical care.

Without aggressive action by organized medicine this trend toward inefficient governmental care will increase. Together we can slow this trend, perhaps reinstitute Percival's, "Code of Ethics," recover some of the lost values and once again allow the patient and the physician to decide how, when, where, and at what cost medical care will be delivered.

The medical profession has long subscribed to a body of ethical statements developed primarily for the benefit of the patient. As a member of this profession, a physician must recognize responsibility not only to patients, but also to society, to other health professionals, and to self.

Doctor Oliver is a family practitioner from Scottsville, KY and Chairman of the KMA Judicial Council.



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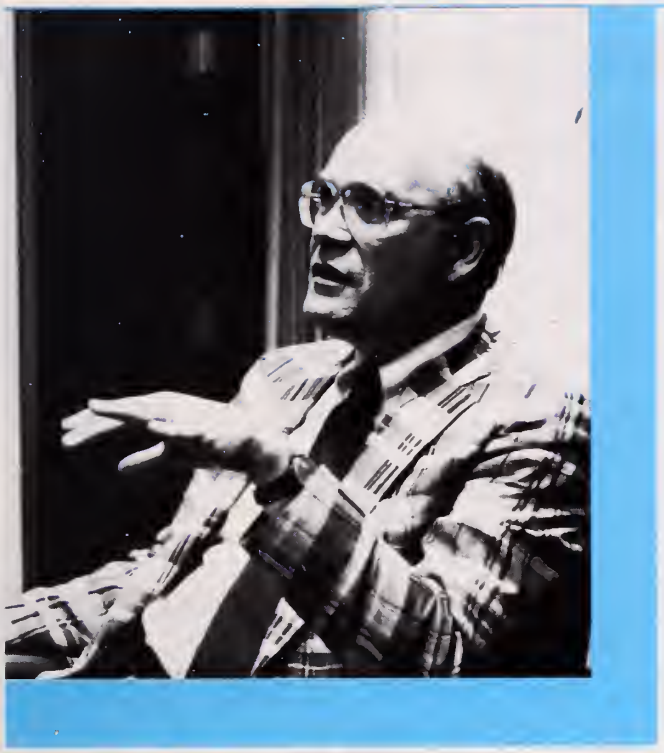

Federation Membership Benefits the Specialist

Charles C. Smith, Jr., M.D.

The importance of membership in the "Federation of American Medicine" has never been more important to the specialist as well as the generalist. Since the American College of Physicians encompasses both categories of physicians, it is particularly important that the College and its members express themselves.

The reason for membership in the Kentucky Medical Association and its component county societies relates to the change in medicine from a corporate nature to a competitive one. This refers not only to the competition in our own specialty and with family practice, but also the imposition of the generalist as gatekeeper in the health care system.

The Kentucky Medical Association brings all groups together in a collegial organization. Through its organization of a Hospital Medical Staff Section, it provides a forum for all groups in dealing with hospital practice. The Interspecialty Council provides a conduit for consideration of policy such as the recent meetings on malpractice solutions.

The State Medical Association provides the only voice that can speak for the whole profession on indigent care, Medicaid, and public health matters, such as school health. In this state, the Kentucky Medical Association has a high profile in Frankfort, as well as with the Chamber of Commerce and organizations such as the American Association of Retired Persons.

I think we can conclude that in the near future our largest professional problem will be protection of the patient. In the various health care systems, we must always be aware not only of the system, but our behavior as physicians in it. If we splinter into specialty groups I fear we will much more be tempted to behave in a narrow fashion in systems which tend to reward decreased utilization.

On the other hand, if we maintain that conviviality and friendly competitive spirt which has prevailed in Kentucky, I think we can see our citizens through the constricted economics of the present. At a time when there are more physicians and more empty hospital beds than ever before, there is a widening decline in care. It will take our collective efforts to solve this paradox.

Charles C. Smith, Jr., M.D., FACP, is Governor, American College of Physicians, a Louisville internist and past president of the KMA.

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Advantages of Organized Medicine for the Resident

Robert LaMont Wood, M.D.

When I was asked to write an article about why I think organized medicine is important, several ideas flashed through my mind. Then I began to think about the essence of medicine. From my standpoint, it is a relationship of trust between the physician and patient. The patient selects a physician because he has a need relating to his health. The physician, in turn, tries to meet that need through medicine and advice concerning lifestyle changes that may prevent or alter the course of illness.

This has been the relationship that has existed between the patient and physician for many years. Today, however, many forces have a place in the physician-patient relationship.

Government agencies, third party payers, and health care corporations are all trying for a piece of the shrinking "medical pie." The changes they have brought have come quickly and have been broad. The physician standing alone has no chance against such strong forces that are sweeping down on medical care and the once sacred physician-patient relationship.

Through the strength of organized medicine, something can be done to at least alter the forces that are coming rapidly down upon us. Through the action of various state and national medical associations, key legislation has been passed that helps the position of the medical community. Though the victories have often not been complete, they have been a step in the right direction.

As a resident, I have been privileged to be one of the KMA Resident Physicians Section representatives on several KMA committees. This opportunity has shown me the things that can be done when physicians work together.

Through the creation of the KMA Resident Physicians Section, residents in the state have been given a voice in Kentucky medicine. In the first year and a half of its existence, several KMA-RPS resolutions concerning resident needs have been adopted by the KMA House of Delegates. Some of these were sent on to the AMA and presented as part of other resolutions concerning the special needs of residents.

Besides serving as a voice for residents, the Resident Physicians Section also offers other services. This year's annual business meeting of the KMA-RPS focused on the malpractice concerns of residents. It is hoped that the residents in attendance gained new insight into this problem that faces us all.

As residents, we have a great opportunity to help make a difference in Kentucky medicine and make a step toward a better future for all of us. In closing, I strongly urge all physicians and in-training physicians to support their local medical society in its efforts to work for us.

Robert LaMont Wood, M.D., is a Third-Year Family Practice Resident at the Trover Clinic Foundation, Clinic Drive, Madisonville, KY 42431.

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A Surgical Point of View on Active Participation in Organized Medicine

Hiram C. Polk, Jr., M.D.

The fundamental goal of medicine will continue to be the provision of informed, caring, compassionate, and "state of the art" medical care for each doctor's patients. To achieve several of these ends, participation in other entities becomes desirable, since they speak to each of those desirable aspects of the patient care component. Let me use this opportunity to briefly describe some insights that have accrued to me as a result of active participation in several of the processes.

The American Board of Surgery, currently led by Executive Director and Secretary-Treasurer, Dr. Ward Griffen, formerly Professor of Surgery and Chairman of the Department of Surgery at the University of Kentucky College of Medicine, is a particularly valuable body. As almost everyone knows, the respective boards develop and administer examinations designed to review the skills of properly qualified candidates. In the case of the American Board of Surgery, the examinations include a written test that is offered once a year, oral examinations offered six to eight times a year, and recertification and other specialty exams in the field of pediatric surgery and general vascular surgery. Furthermore, the Board is active in developing many policies regarding the quality of educational programs in surgery in the United States. As such, it interfaces with the American Board of Medical Specialties, the Accreditation Council on Graduate Medical Education through the Residency Review Committee for Surgery, and its own parents, which include the American College of Surgeons, the American Medical Association, the American Surgical Association and numerous regional and more narrowly defined specialty societies. Each of its approximately 20 directors, during a six-year term, commit 25 or more days per year to Board business without compensation, the sole goal being to enhance the standard of surgical practice in the United States.

Having recently completed a seemingly endless term as chairman of the Residency Review Committee for Surgery, I likewise developed much insight about that process. The boards, as it were, assess the performance of graduates of accredited training programs. The several Residency Review Committees are charged with determining that they are, indeed, appropriate educational environments and experiences. The development of objective criteria for assessment of a quality educational situation and their application through personal and representative site visits to the scene in question have further elevated the quality of surgical training in the United States. Again, a relatively few people commit a large amount of time in an often thankless way for this important undertaking. Sample actions of that body over a recent two year period are referenced in Table 1.

Both the Residency Review Committee and the American Board of Surgery are directed toward the formal, post-residency educational process, ie, the five to eight years after completion of medical school.

Moreover, both have been particularly alert and responsive to several political maneuvers to lessen the quality of surgical care brought to the American public, and they continue to do so in a most constructive way.

Perhaps most important in an ongoing sense, the American College of Surgeons provides representation for nearly 50,000 surgeons in all known specialties. I particularly like to point out that now more than half of the fellowship of the College are "non-general" surgeons and it clearly is a broadly representative group. The College has traditionally been responsible for an ongoing educational program for surgeons in practice and, if you will, is the teaching arm of the surgical superstructure. In recent years, it has increasingly made a commitment, under what I view as the wise judgment of its Board of Regents, to be active in political affairs, representing the best interests of the surgical patient in the United States and never, to my view, the selfish interests of its surgeon members. The College likewise interacts with virtually all of the significant structures in American medicine and continues to do so while never losing sight of its educational obligations for the practicing surgeon.

The regional surgical societies, of which Kentucky is fortunate to fall into the geographic domain of several, provide in a less formal way, active and ongoing programs, that are related primarily to the presentation of new scientific material at their meetings, which in due course are subject to the editorial review of our leading journals and subsequent publication, as a general rule. Here the emphasis is upon new information and/or reassessment of old practices. Once again, the physician participant in these kinds of activities will find himself literally on the cutting edge of new ideas, both those that prove to be useful and those that must be discarded and further solutions sought.

Certainly there are an interlocking set of values, groups and individuals involved in the organized medicine process, as it affects the surgeon. The refereed and reviewed journals, of which there are at least five major ones in the broad field of general surgery and at least two in every surgical specialty, play an important role as well. Here again, the thousands of donated hours of the editorial board, in attempting to determine which of these papers represent sound science worthy of the stamp of approval that publication implies, continues to be underestimated. As the current editor of the *American Journal of Surgery*, I appreciate this more than ever as many of my editorial colleagues will literally spend hours in the library determining the appropriate documentation and value of proposed new procedures, whether they be derived from the laboratory bench and the experimental animal or the careful analysis of complex patients.

Finally, at the increasingly locally defined level, the activities of our state medical association and our county medical societies continue to be important and effective. These groups must represent us in the state legislature and continue to do so in a highly effective way. Too few physicians are basically aware that the fundamental control of medical practice in America is a state level undertaking: no matter how much stature one may carry at the National Institutes of Health nor how broadly his research work may be referenced, it is still the crucial role of the leaders of the state medical association to present before our elected law makers those legal matters of great interest to the profession and, most importantly, to our patients.

Participation in organized medicine can range from dues paying to regular attendance. It certainly is in everyone's best interests for the financial support base of organized medicine to be broad. Those who then contribute financially will inevitably see the considerable value of their personal participation, providing an ongoing opportunity for their personal opinions and thoughtful analyses of issues, ranging from new science to old politics, to be implemented by their respective organizations at every level.

Doctor Polk is Professor and Chairman, Department of Surgery, University of Louisville School of Medicine, Louisville, Kentucky.

Table 1. Summary of Actions Taken by the Residency Review Committee for Surgery 1983–1984.

Programs reviewed	164
New programs	8
Provisionally approved	2
Approval withheld	6
Positive actions	91
Continued full approval	43
*New full approval	18
Continued provisional approval	6
Approved increase in resident	8
Approved temporary increase in number of residents	7
Other positive actions	8
Accept progress reports or defer action	20
Adverse actions	25
New probational approval	4
Withdrawal of approval	7
Denied increase in residents	8
Denied temporary increase in number of residents	4
Other adverse action	2
Reconsiderations	20
Sustained prior action	17
Reversed prior action	3

*From prior provisional or probationary approval (From Polk HC Jr: Report of the activities of the residency review committee for surgery 1983–1984. ACS Buss 69:25–27, 1984.

Why I Participate

Sally Sherard Mattingly, M.D.

Harold Haller, M.D., wrote earlier this summer asking me to put down my thoughts on women physicians in organized medicine. What follows is a brief statement of why I participate.

Initially, as I was beginning my practice at the University of Kentucky, I joined the Fayette County Medical Society (FCMS) and thus the Kentucky Medical Association (KMA) because that's what most physicians did. These memberships were viewed as a means of meeting and exchanging ideas with other local doctors — particularly important for me since I would only be practicing at the medical center and would not be drinking coffee in an assortment of hospital physician lounges. I did not consider membership as a first step toward more involvement in leadership roles.

As I continued to attend our monthly meetings, however, I was asked to participate more at various levels — first as a council member, then as an elected delegate to the KMA, then my schedule certainly being as full and hectic as most, I periodically ask myself, "Why am I doing this? Why don't I just say 'no,' and stay home those nights of meetings and days of KMA meetings?"

The game rules of the practice of medicine have changed considerably over recent years and months, and new twists and angles are added almost on a daily basis. It is almost impossible for an individual physician to keep up with all that's happening much less have any influence in shaping medicine's response to external forces in molding our future. Like it or not, organized medicine, from our local societies through the KMA right on up to the AMA, is our only avenue. If we are going to practice in an environment with which we are comfortable, all physicians, women and men alike, must speak as a unified voice. If as an individual doctor, you are dissatisfied and don't think organized medicine is doing enough or the right things for you and others, then it is imperative that you, too, join at the grass roots level and PARTICIPATE.

I really never considered joining the national medical groups only for women. I felt that I and other women should join **the** state societies and **the** national societies of medicine. If the ever-increasing number of female physicians want their voices to be heard among all physicians, then they've got to be where all physicians are. Time is a constant problem — so much to get done on a daily basis. If we don't participate now, however, the slight chance that all of us as physicians have of shaping our destiny will be lost.

Women are welcome in organized medicine — at least I've found that to be true in Kentucky. Certainly anyone willing to work and participate is viewed as an asset to the organization. Some physicians are women just like some are men, and the ratio is changing dramatically. It is high time that all physicians work together to make our voice heard.

Finally, I joined organized medicine for the fellowship, and find that I have, almost in spite of myself, become a very active participant in the business of the societies. The fellowship I've enjoyed while meeting and working in these organizations has been, for me, the greatest personal benefit from them, and I look forward to future associations.

Doctor Mattingly is Associate Professor of Surgery, Univeristy of Kentucky College of Medicine, Lexington, Kentucky. She is also President-Elect of the Fayette County Medical Society.

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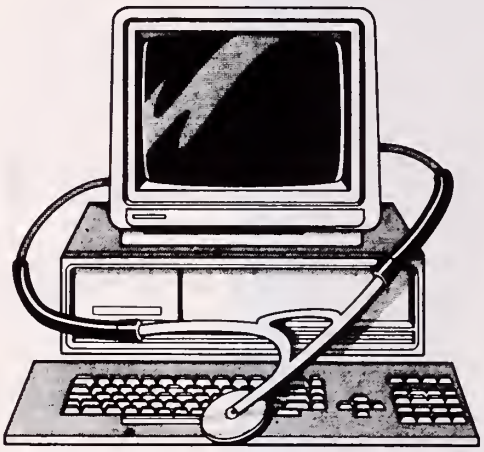

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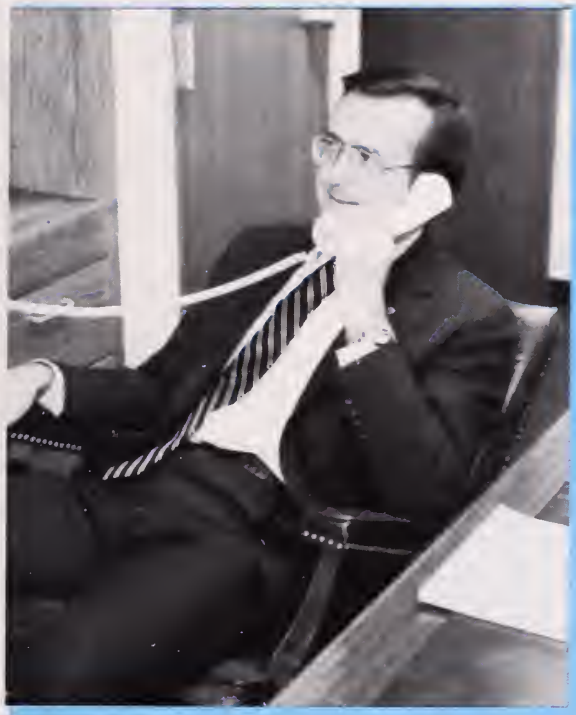

AMA Supports YOU? — Do YOU Support the AMA?

Fred C. Rainey, M.D.

One could write pages relative to the need and importance of all physicians belonging to AMA. It seems the "real life" facts should be clear to all of us.

We are practicing during the most turbulent time of our professional lives. We have more and more burdensome regulations being proposed as well as objectionable legislation than ever before. One example that stands out is the legislative proposal which would have required mandatory medicare assignment which AMA successfully opposed. Multiple delivery mechanisms, socioeconomic issues, and cost containment approaches to the delivery of medical care have pitted physician against physician, facility against facility, resulting in the disruption of long-standing relationships. We anticipate more of the same in the future, only worse.

We must be realistic — AMA is the only umbrella professional organization with the resources and ability to adequately serve the multiple needs of our profession.

While **no one** (including AMA) can solve all of the problems, it seems clear that with the efforts of a **strong** AMA rests our only hope. We need **all** physicians as dues-paying, participatory members so that we may share together the task of protecting the interests of our patients and our profession.

Who else can do it? Who else can represent us? Is it reasonable and fair to expect all physicians to join and pay their fair share in the form of dues? I believe that it is. We may not agree with AMA 100% of the time, but then with whom **do** we agree 100% of the time?! If we disagree, do we better serve mankind by sitting outside as a nonparticipant or by joining and doing our fair share to make improvements?!

Unless we "hang together," we will surely "hang separately"!

Fred C. Rainey, M.D. is a family practitioner in Elizabethtown, KY and KMA Delegate to the AMA.

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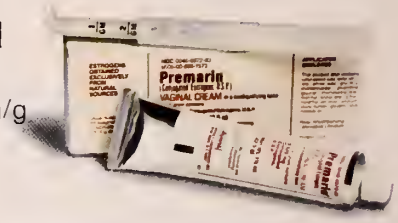

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)*

PREMARIN® Brand of conjugated estrogens tablets, USP
PREMARIN® Brand of conjugated estrogens Vaginal Cream in a nonliquefying base

1 ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4 5 to 13 9 times greater than in nonusers The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses

2 ESTROGENS SHOULD NOT BE USED DURING PREGNANCY
The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare This risk has been estimated as not greater than 4 per 1,000 exposures Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects One case control study estimated a 4 7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000 In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters Tablets are available in 0.3 mg, 0.625 mg, 0 9 mg, 1.25 mg, and 2 5 mg strengths of conjugated estrogens. Cream is available as 0 625 mg conjugated estrogens per gram

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) **Osteoporosis (abnormally low bone mass).** Atrophic vaginitis Kraurosis vulvae Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes Whether this will provide protection from endometrial carcinoma has not been clearly established There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects

CONTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1 Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease 2 Known or suspected estrogen-dependent neoplasia 3 Known or suspected pregnancy (See Boxed Warning). 4 Undiagnosed abnormal genital bleeding 5 Active thrombophlebitis or thromboembolic disorders 6 A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans (See Boxed Warning) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use They should be used with caution in patients with cerebral vascular or coronary artery disease Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use The pathologist should be advised of estrogen therapy when relevant specimens are submitted If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism

The following changes may be expected with larger doses of estrogen.

a Increased sulfobromophthalein retention.

b Increased prothrombin and factors VII, VIII, IX, and X, decreased antithrombin 3; increased norepinephrine-induced platelet aggregability

c Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay Free T3 resin uptake is decreased, reflecting the elevated TBG, free T4 concentration is unaltered

d Impaired glucose tolerance

e Decreased pregnanediol excretion

f. Reduced response to metyrapone test

g Reduced serum folate concentration.

h. Increased serum triglyceride and phospholipid concentration. As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow, dysmenorrhea, premenstrual-like syndrome; amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued, erythema multiforme; erythema nodosum; hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females

DOSAGE AND ADMINISTRATION:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. *Given cyclically for short-term use only* For treatment of moderate to severe *vasomotor* symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1 25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals

2 *Given cyclically* Female castration. Osteoporosis Female castration—1 25 mg daily, cyclically Adjust upward or downward according to response of the patient For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis —0 625 mg daily Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only For treatment of atrophic vaginitis or kraurosis vulvae

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals

Usual dosage range 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding

References:

1. Whitehead MI, Townsend PT, Pryse-Davies J, et al Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium. *N Engl J Med* 19B1;305:1599-1605 2. Paterson MEL, Wade-Evans T, Sturdee DW, et al Endometrial disease after treatment with oestrogens and progestogens in the climacteric. *Br Med J* 19B0;2B0 B22-B24 3. Magos AL, Brincat M, Studd JWW, et al Amenorrhea and endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women. *Obstet Gynecol* 19B5; 67 496-499. 4. Whitehead MI, Lane G, Siddle N, et al Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women. *Semin Reprod Endocrinol* 19B3;1:1;41-52. 5. Barnes RB, Roy S, Lobo RA Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women *Obstet Gynecol* 1985,66:216-219

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KEMPAC Today

Harold Bushey, M.D.

What is KEMPAC? I have been increasingly aware that many of our KMA members do not know the answer to that question. Furthermore many do not seem concerned. Anyway, KEMPAC's full name is "Kentucky Educational Medical Political Action Committee." It is a voluntary, non-partisan association of Kentucky Physicians, their spouses and immediate family members, residents, medical students and medical staff, founded in 1962 to give the Kentucky Physicians an effective means of political action. The organization has a Board of Directors, appointed by the KMA Board of Trustees, that is bipartisan; there is a member of each major political party from each congressional district, and four members representing the KMA Auxiliary.

The goal of KEMPAC is to elect the best possible candidates to both the Congress of the United States and the Kentucky General Assembly. We support the candidate's platform and philosophy, and not the party. The support is usually in the form of a financial contribution to the candidate during the campaign. The significance of early support prior to the election is greater to the candidate than money contributed at the end of a campaign. The Board meets several times during the election year to review requests for candidate support. Several factors are included in the evaluation, including prior record (if an incumbent), committee and leadership positions, lobbyists' reports, local community support, and a realistic appraisal of chance of winning. The requests come from local KEMPAC members who are supporting the candidate, usually with a local appraisal of the race.

Each legislative session illustrates the need for legislators in Frankfort and Washington who are favorable to medicine. Our lobbyists work long and fervently in Frankfort to protect our interests.

and the interests of our patients. This means supporting some bills, working to defeat some bills, or to modify bills. We need legislators who will remember our support prior to the election, so they will be receptive in committees or at time of voting when our lobbyists discuss the medical position with them.

The legislators look at the numbers. They are impressed by unified support of a group, as well as the numbers on the support check. We need all the members of KMA to join with us in KEMPAC to present that unified front, as well as needing the financial support of all KMA so we can exert a greater influence on the outcome of the election.

Our success rate in the past has been good, but we cannot rest on past victories. Each year new challenges to the medical profession are cropping up in Washington and Frankfort, and must be met aggressively if we hope to maintain good medical care for our patients. Now is the time that all Kentucky physicians must unite if we are to achieve this goal. KEMPAC is the means to do this. TODAY is the time. Join KEMPAC TODAY!

Harold L. Bushey, M.D., a Barbourville internist is KEMPAC Chairman and KMA Trustee.

Membership in KEMPAC/AMPAC is joint Fundraising effort.

☐ YES,

I wish to become a KEMPAC/AMPAC member. Enclosed is my personal check for $100.

Please make check payable to: KEMPAC

Mail to: 3532 Ephraim McDowell Dr., Louisville, KY 40205

Name

Address

City, State, Zip

If your practice is incorporated, KEMPAC and AMPAC voluntary political contributions should be written on a PERSONAL CHECK. Contributions are not limited to the suggested amount. Neither the AMA nor the KMA will favor or disadvantage anyone based upon the amounts of or failure to make PAC contributions.

A portion of voluntary political contributions will be be used in connection with Federal elections and are subject to the prohibitions and limitations of the Federal Election Campaign Act.

Employed Physicians — A Growing Entity

Dwight L. Blackburn, M.D.

Over the past six plus months, I have had the privilege of being Chairman of a National Steering Committee that developed a program and held the first "Symposium for Employed Physicians" in Chicago on June 14, 1986.

The purpose of the symposium was to find out what the interests, aims and objectives of the fast growing group of employed physicians may be. The symposium was a tremendous success, featuring speakers such as Jim Sammons, M.D., Uwe Reinhardt, M.D., Elliott Freidsen, M.D., Royce Deener and others.

The theme of the symposium was "what can AMA do for the employed physician?" Ample time was allowed for questions, answers and general discussion from the participants. Interaction between speaker and audience was good, discussion groups seemed to be enthusiastic and the concensus is that these forums should be continued on either an annual or possibly biannual basis.

The big question in all of this is "why cater to the employed physician?" The employed physician, by AMA definition, is anyone who derives his income from other than direct fee for service. According to AMA standards, any physician in a group of three or more is considered employed by the group and on a salary arrangement. Of course, there are other categories of employed physicians such as administrative, educators, institutional and directorships.

One may not realize that at year end 1984, there were approximately 26% employed physicians in the U.S.A., and at year end 1985, this figure had risen to approximately 40%. It seems apparent that soon 50% of all physicians will be employed in some category or other.

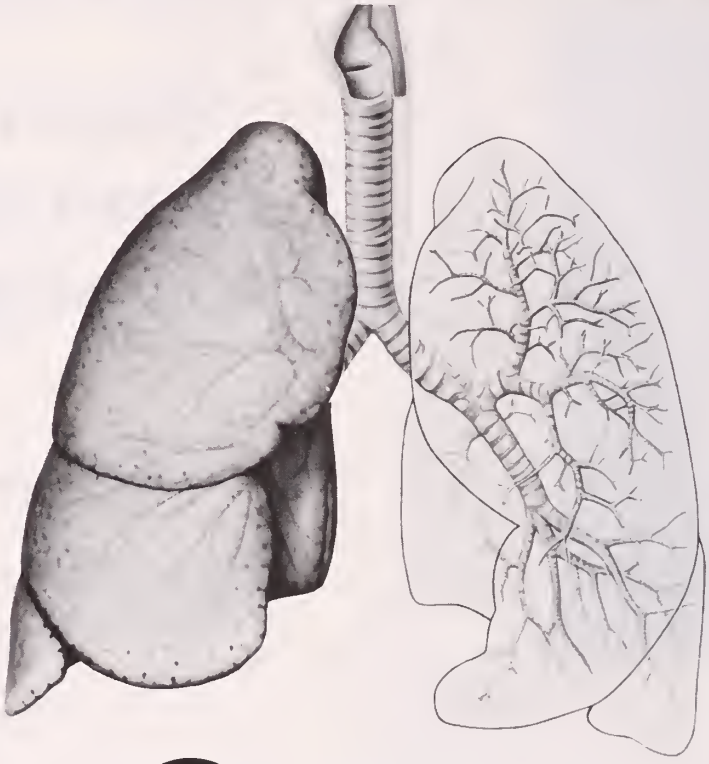
Employed physicians then want to remain a part of AMA and of organized medicine. Hopefully a section will be started in AMA for employed physicians as it has for medical staffs, residents and interns, *etc.* It may be possible that a position on the Board of Trustees of AMA could be established for an employed physician.

The intent of this article is to bring to the readers attention the fact that organized medicine is aware of the large and growing numbers of physicians who are no longer self-employed, but instead are employed by group, institutions, *etc.* Also, it is to inform the reader that organized medicine is attempting to bring into its fold a segment that up to now has been overlooked if not completely ignored.

The author applauds this effort on the part of organized medicine to continue to work for all entities of the profession, to keep us united in our goals, to make membership benefits more attractive for all physicians and above all to continue to represent medicine as a free enterprize system within which we can continue individually or collectively to practice our profession as we see fit.

Dwight L. Blackburn, M.D. is medical consultant, Blue Cross & Blue Shield of Kentucky. He was in private practice in Berea, Ky. for 28 years and is past President of the KMA.

Consider the causative organisms...



Ceclor®
cefaclor

250-mg Pulvules® t.i.d.

offers effectiveness against the major causes of bacterial bronchitis

H. influenzae, H. influenzae, S. pneumoniae, S. pyogenes
(ampicillin-susceptible) (ampicillin-resistant)

Brief Summary Consult the package literature for prescribing information

Indications and Usage Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae* and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics Such colitis may range in severity from mild to life threatening

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic associated colitis

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone In moderate to severe cases management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid electrolyte, and protein supplementation When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C difficile* Other causes of colitis should be ruled out

Precautions *General Precautions* — If an allergic reaction to Ceclor* (cefaclor, Lilly) occurs, the drug should be discontinued and, if necessary, the patient should be treated with appropriate agents, e g , pressor amines, antihistamines, or corticosteroids

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms Careful observation of the patient is essential If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip USP, Lilly)

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease particularly colitis

Usage in Pregnancy — Pregnancy Category B — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor* (cefaclor, Lilly) There are however, no adequate and well-controlled studies in pregnant women Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed

Nursing Mothers — Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses Average levels were 0 18, 0 20, 0 21, and 0 16 mcg/ml at two three, four and five hours respectively Trace amounts were detected at one hour The effect on nursing infants is not known Caution should be exercised when Ceclor is administered to a nursing woman

Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established

Adverse Reactions Adverse effects considered related to therapy with Ceclor are uncommon and are listed below

Gastrointestinal symptoms occur in about 2 5 percent of patients and include diarrhea (1 in 70)

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment Nausea and vomiting have been reported rarely

Hypersensitivity reactions have been reported in about 1 5 percent of patients and include morbiliform eruptions (1 in 100) Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently fever) have been reported These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor Such reactions have been reported more frequently in children than in adults Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy No serious sequelae have been reported Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients)

Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported Although they were of uncertain etiology they are listed below to serve as alerting information for the physician

Hepatic — Slight elevations in SGOT SGPT, or alkaline phosphatase values (1 in 40)

Hematopoietic — Transient fluctuations in leukocyte count predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200)

(061782R)

Note Ceclor* (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections including the prophylaxis of rheumatic fever See prescribing information

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What is the Principal Advantage to Membership in the KMA?

A. Evan Overstreet, M.D.

In October 1852, the first president of the Kentucky Medical Association Doctor William Loftus Sutton, in his presidential address, discussed one of the major objects of the constitution of the new state medical association: "the cultivation and advancement of science and literature, by the collection, diffusion, interchange, preservation, and general circulation of medical knowledge throughout the state." Doctor Sutton recognized that medical journals must be supported by subscriptions and contributions and deplored the fact that the numbers contributing were too small. To encourage contributions he said ". . .if a man wishes to understand a subject thoroughly, one of the best things he can do is to write an elaborate treatise on it." "We all have our 'anomalous cases' and our 'astonishing cures' which we love to rehearse in the ears of our kind and credulous friends: why not lay them before those whose judgement is worth something; whose good opinion will confer honor?"

From the beginning, in 1851, the business and scientific sessions of the annual meetings were reported to the entire membership in the "Proceedings" once yearly. The "Proceedings" were later called the "Transactions."

The beginning of monthly publications came in 1903 and this was called the "Bulletin."

In the first issue of the "Bulletin" the lead editorial stated "the papers read at the Annual Meeting of the Association are to be journalized, will be published monthly, three to four at a time, and will appear so persistently and in such live form, that they will be received with much greater anticipation than the old volume of "Transactions."

We have persisted in trying to provide an outlet for publications by any doctor in Kentucky and we are particularly eager to publish an article on any subject that is a rational, inventive treatment, old, new, common or obscure.

Advertising, from the standpoint of the reader, has always seemed to me a matter of minor importance. From the standpoint of publishing, advertising is a matter of the greatest and most practical importance. We want the advertising to be a practical, desirable and reliable contribution to the needs and desires of the reader. The advertisers want our Journal to be of high quality, attractive to a wide readership. The reason for this cozy, cooperative relationship is now, and was in the beginning obvious.

The State Medical Journal Advertising Bureau has served the interests of advertisers and state medical journals well for years. Its influence is increasing and the enthusiastic participation of some 20 state medical journals results in mutual efforts to improve the attraction of the composition and contents of the journals. Specific advances and problems are discussed and disseminated at periodic national conferences. All state medical journals now face the threat of impairment or extinction for financial reasons and the conferences allow us to observe the succeeding and failing efforts of journals to strive and survive.

Some journals assist their finances by aggressively selling local regional and national ads on their own. However, the Journal feels responsible to protect its readers, and the judgement of what ads to accept and reject becomes agonizing. This Journal answers to the board of trustees of the KMA and serves the membership of the KMA. The board allots thousands of dollars a year to help publish the journal

and may cease its publication today if it decides to. These issues were discussed in the September issue of the "Bulletin" in 1904, its second year of publication.

In order to be entirely independent, above and beyond the suspicion of being run for purely individual gain, it is essential that the State Medical Journal should be owned and controlled by the State Association from the title page clear through to the back cover. Why do privately owned journals exist at all? Is it for philanthropic purposes that altruistic editors take money risks and give valuable time to their conduct? Not at all. It is for the purpose of money making, directly or indirectly. We have no intention of saying that such purpose is not an eminently proper one. If something which is sold brings profit to the seller, and profit to the buyer, surely it is as proper a thing as can be. We are only attempting to look at the matter as it really is. Money making becomes thus a prime necessity of your privately owned journal. Without it its raison d'etre disappears. As a consequence the Journal makes sturdy efforts to secure advertisements, and, being necessitous, is not over particular as to the kind; it is only the number which is of importance.

Now, your state medical journal is quite independent about this matter. Being assured from its very inception of the backing and support of the state association, it could readily exist if it carried no advertisements at all. Indeed, some very excellent physicians have urged that it would be more dignified for the state journals to carry no advertisements. But this view is hardly tenable if we are willing to concede that things advertised have value in the treatment of the sick. If such is the case, the medical journal is the natural and proper medium of communication between the maker and the user; and if advertisements were not paid for at all, when viewed in this light the pages devoted to them would still be useful ones, provided always the advertisements were of the right kind.

So much for the vulgar and purely business considerations. The state journal has other and much more important functions. It must, and undoubtedly will, serve to hold together the organization which has been effected in the state at the cost of so much labor. It must " 'carry the message to garcia' within the state boundary; it must strive not so much to exploit the few bright stars of the galaxy, but rather to develop all over the state the lesser lights which shall come to shine in the fullness of time with a brightness which shall shed glory on the profession of medicine, and shall bring with it better and well-deserved material rewards."

The principal advantage to membership is the Journal of the Kentucky Medical Association.

Dr. Overstreet, an internist, has been editor of the journal since 1977.

LETTERS

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the Journal. Names will be withheld upon request, but anonymous letters will not be accepted.

To the Editor:

With the passage of time, it appears a picture is evolving. This picture shows that many people entering the health care field hold MBA's and other degrees that show definite skills in administration. These people are not medical service providers however; they are medical service provider manipulators. Their goals are naturally for their own well-being. Their goals are not for the well-being of the medical profession.

The medical profession's obligation is to provide good medical service. In order to do this, they must concentrate on that service-giving and try to remove themselves from the manipulative efforts of others.

There are so many movements and schemes at the present time that many of them are crumbling and failing. Hopefully, the doctor is going to concentrate on avoiding these groups and schemes and make every effort to stay free to give unencumbered medical service.

Edgar B. Morgan, M.D.
2708 Frankfort Ave.
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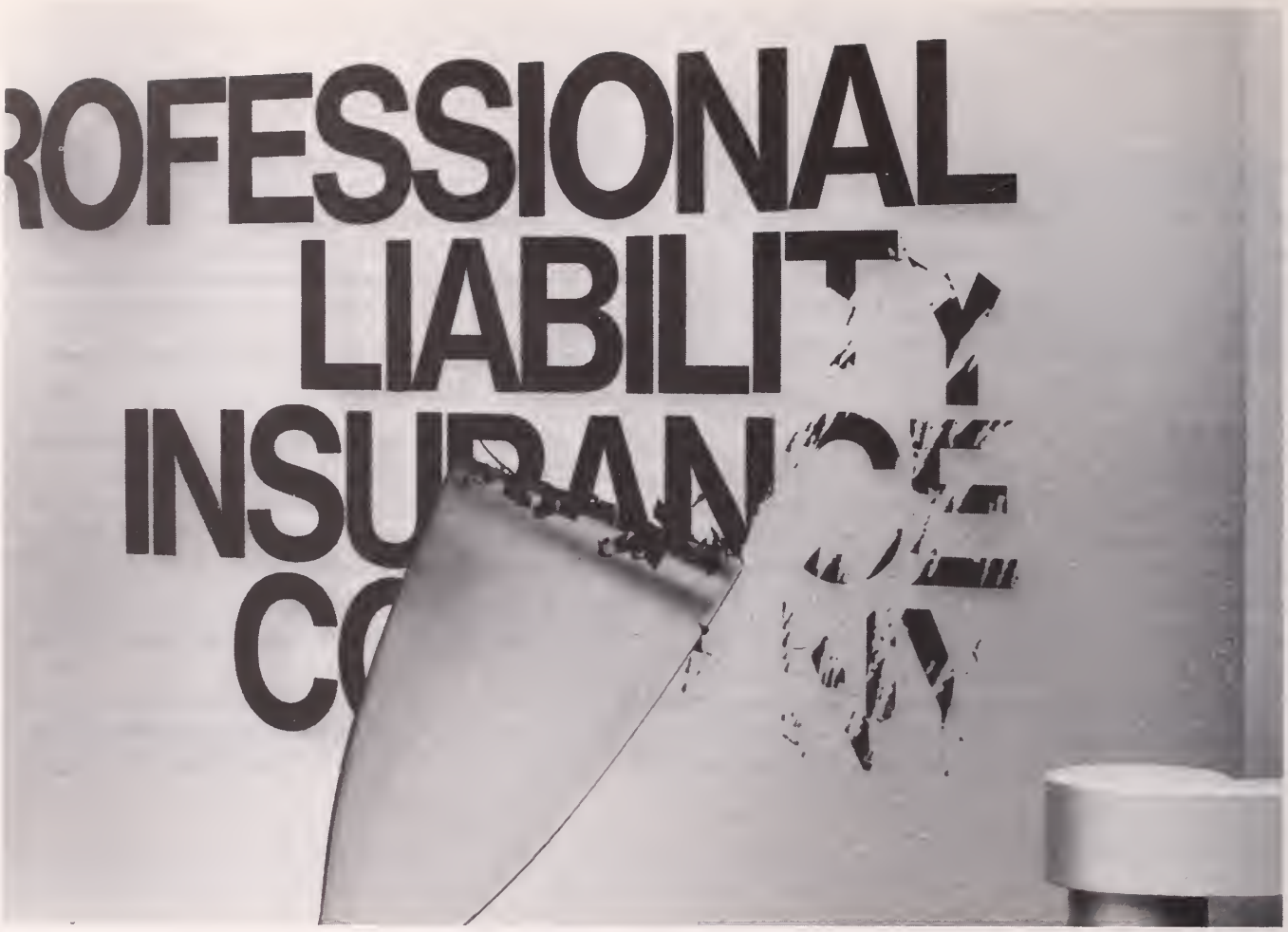

In ten years your malpractice carrier may be just a memory.

Unless it's Medical Protective.

As you consider professional liability insurance, consider this. The coverages stated in the policy are basically a promise — a promise to be here when needed regardless of legal climate or economic conditions. A company's ability to keep this promise is critical because your financial security may depend on it. Unfortunately, too many firms are now finding the task impossible.

Analyze your liability insurance options carefully just as you would any important investment. Go beyond the agent and the policy to the company that stands behind both. How long has it been in operation? Has it weathered some of the tough times? Will it be there for you when you need help?

The Medical Protective Company pioneered professional liability coverage before the turn of the century and has served doctors exclusively ever since. Over 500,000 of them. Through good times and bad. We'll be here when you need us.

Contact The Medical Protective Company through one of our general agents. History shows we keep our promises.

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Motrin® 800 mg TABLETS

ibuprofen

Extra strength
Convenience
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J-6138 January 1986

Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

* **WARNING**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: **Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: **'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.**

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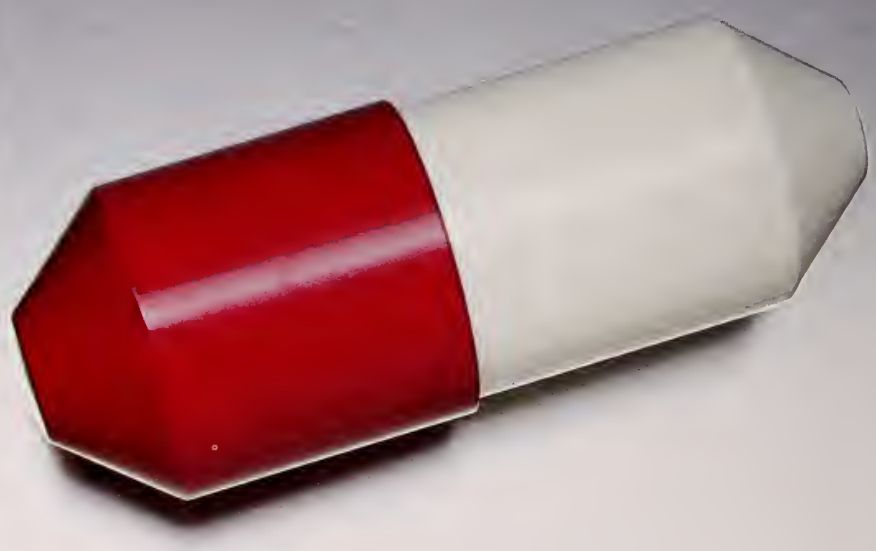

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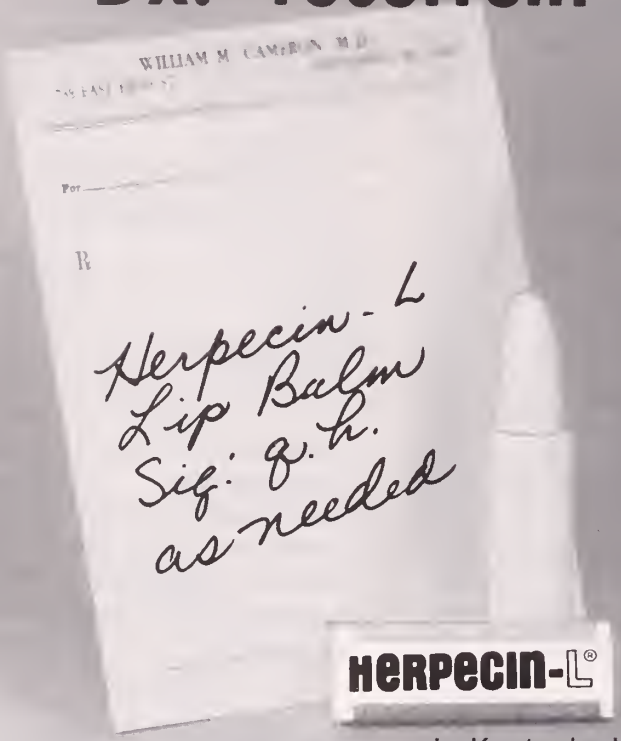

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MEMBERS

William T. Rumage, Jr., M.D., Louisville, was elected President of the Southeastern Surgical Congress during their Annual Meeting.

Doctor Rumage is a 1946 graduate of the New York School of Medicine and is a past Chairman of the KMA Emergency Medical Care Seminar.

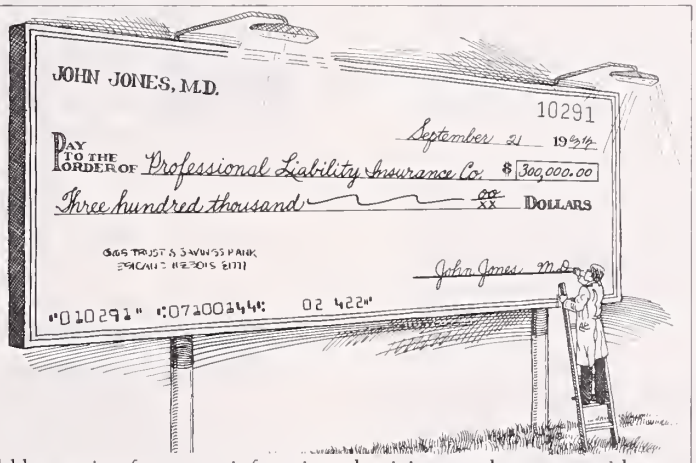
W. Donald Janney, M.D., Ft. Mitchell, and **Marvin H. Olson, M.D.**, Lexington, received special recognition from the American College of Radiology during the Annual Meeting in September. Both doctors were selected for their outstanding contributions to the field of radiology and named as fellows by the College's Board of Chancellors.

Both Doctor Janney and Doctor Olson are graduates of the University of Wisconsin Medical School.

James A. Baumgarten, M.D., has been appointed Director, Claims Prevention and Awareness for the Kentucky Medical Insurance Company. He will be responsible for development and management of KMIC's claims awareness and prevention programs and CME efforts.

Doctor Baumgarten served as a radiologist for 26 years on staff of the Owensboro-Daviess County and Mercy Hospitals in Daviess County, Kentucky. He has been active in the KMA, serving as chairman of the Scientific Program Committee and served on the KMIC Board of Directors from 1979 to 1986.

Doctor Baumgarten received his medical degree from Marquette University in Milwaukee, Wisconsin. He is a member of the American College of Radiology, American Board of Radiology and the American Roentgen Society.



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MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.

2. Drinking to handle problems or relieve symptoms.

3. Obvious preoccupation with alcohol and the frequent need to have a drink.

4. Surreptitious drinking or gulping of drinks.

5. Tendency toward making alibis and weak excuses for drinking.

6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.

7. Frequent absenteeism from the job, especially following weekends and holidays.

8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.

9. Shabby appearance. poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.

10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.

11. Multiple contacts with the health care system with disorders that are alcohol caused or related.

12. Persistent marital and family problems, perhaps with multiple marriages.

13. History of arrests for drunkenness or drunken driving.

Submitted by the KMA Impaired Physicians' Committee

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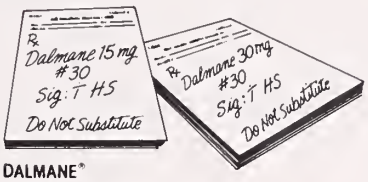

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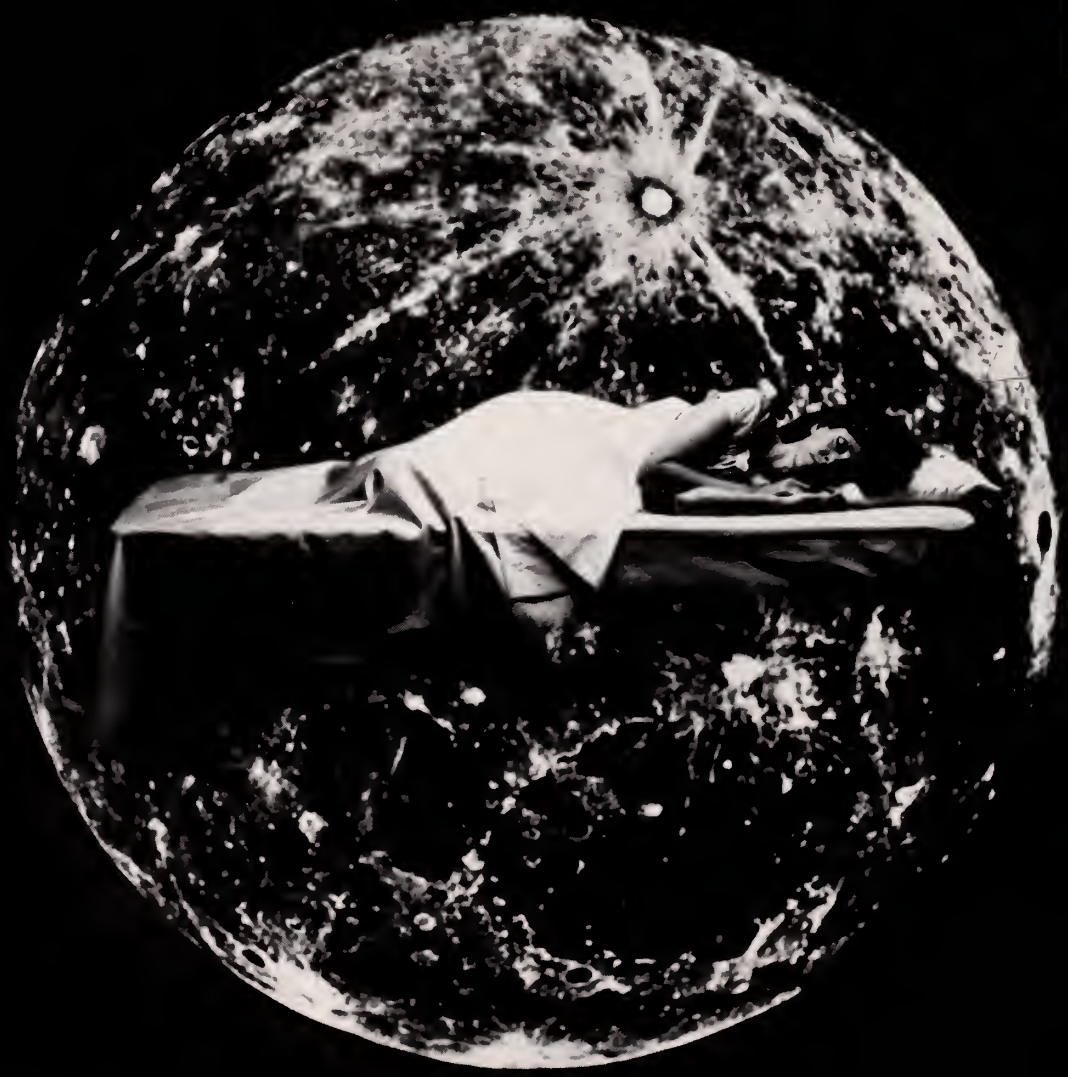

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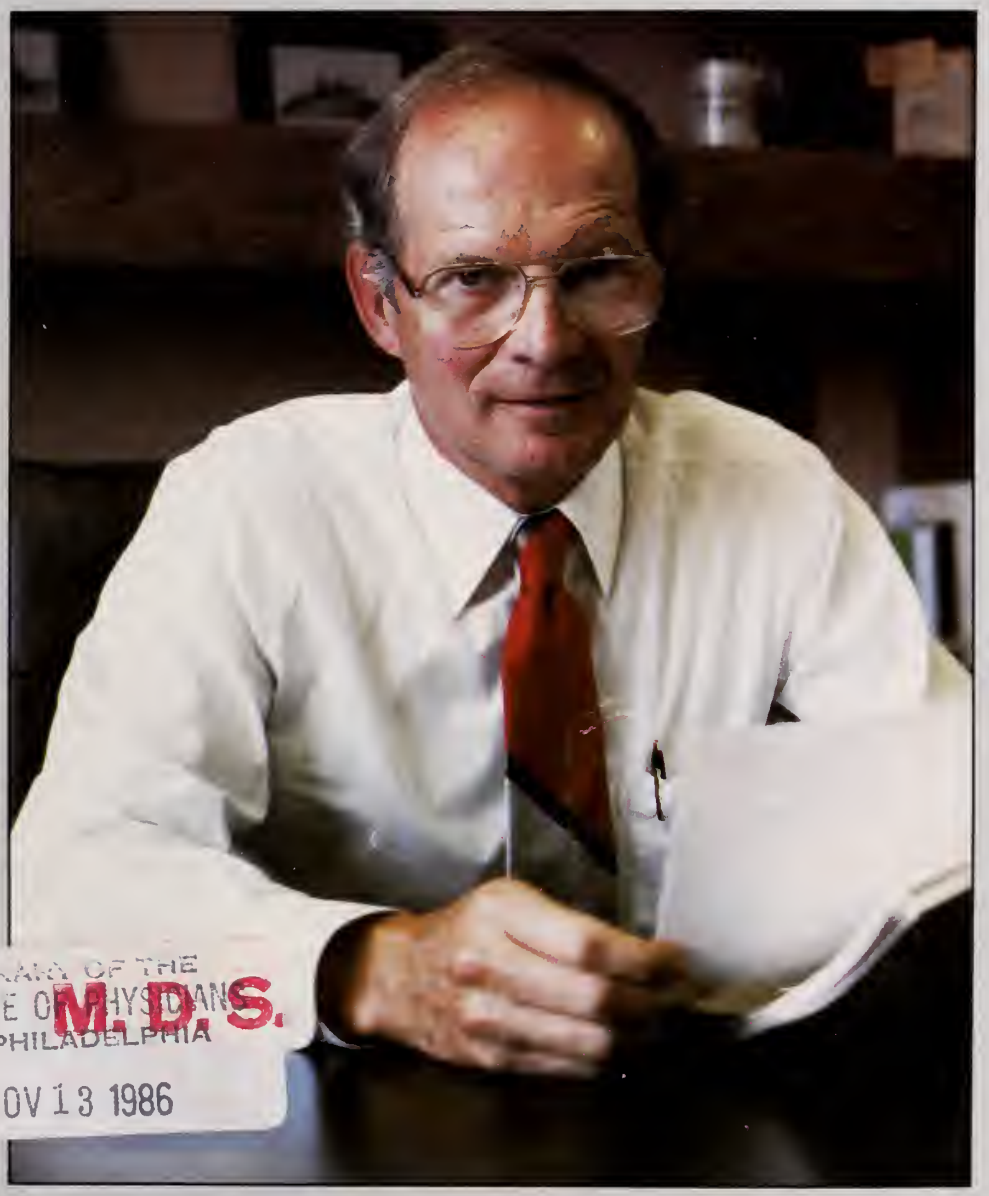

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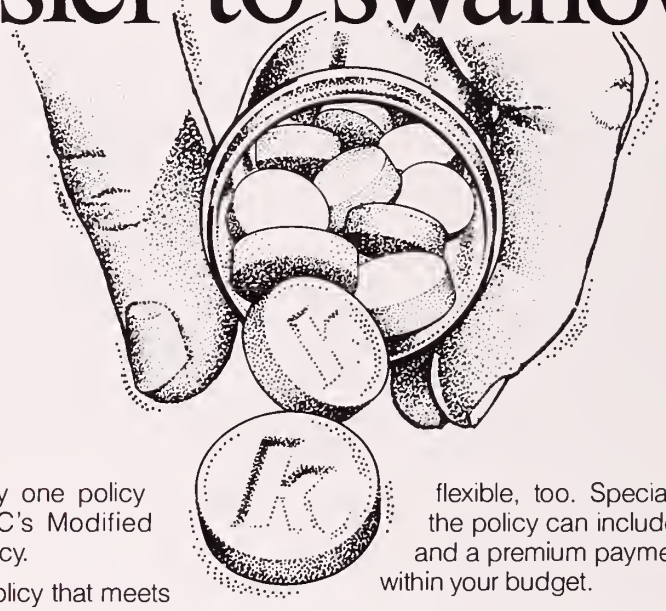

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An Endangered Species?

The Kentucky Medical Association's House of Delegates has finished its 1986 deliberations during which it dealt with 49 reports and 31 resolutions. During the three-day meeting the delegates, officers, staff and KMA members justified my faith in their collective wisdom and patience. Many complex and frustrating problems were dealt with in a responsible way.

The centerpiece of the 1986 meeting was Resolution F which outlined our program for relief from the professional liability problem. This four-pronged program of legislative activities, KMA membership involvement, coalition efforts, and public education is a strong, flexible, well-concieved foundation for our efforts. It will be circulated to all our members and deserves the attention of each of you.

Medical liability is obviously a very important problem not only from an economic standpoint but, even more importantly, because of what it is doing to the practice of medicine in Kentucky and its effect on the quality of medical care.

It is very important that we succeed in our efforts. However, I believe there is something that is even more important. That is how we as Kentucky physicians deal with the liability problem, and how we function in the arena where this battle will be fought. There are many who say that medicine as we know it is an endangered species—we are a dinosaur—social and economic evolution has left us behind. It is said that medicine is unable to organize, to focus its energy, to work out its internal conflicts, and to emerge as an effective force in a competative give-and-take political society.

How we, the KMA, conduct ourselves in dealing with the medical liability problem will go a long way in answering these questions. Whether we win or lose in the liability struggle *IS IMPORTANT*; how we conduct the effort and how we function under the stress and frustration is *CRUCIAL*.

Richard F. Hench, M.D.
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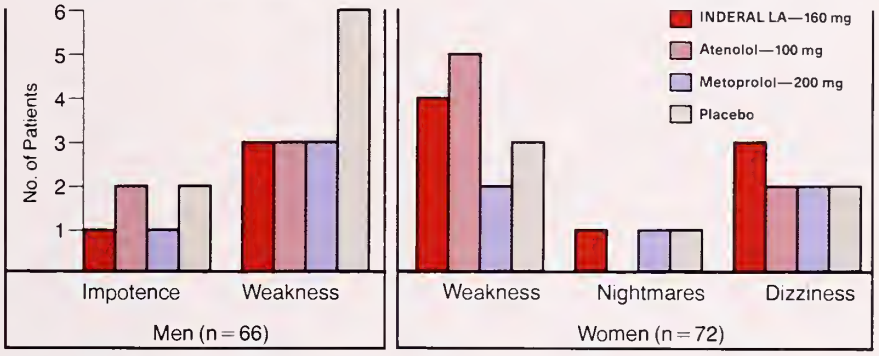

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Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible)

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications

THYROTOXICOSIS Beta blockade may mask certain clinical signs of hyperthyroidism Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm Propranolol does not distort thyroid function tests

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MAJOR SURGERY The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes In these patients, it may be more difficult to adjust the dosage of insulin Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia In patients with impaired renal function, cumulative effects of the drug may develop

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma

Thiazides may add to or potentiate the action of other antihypertensive drugs Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL Propranolol should be used with caution in patients with impaired hepatic or renal function Propranolol is not indicated for the treatment of hypertensive emergencies

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure Patients should be told that propranolol may interfere with the glaucoma screening test Withdrawal may lead to a return of increased intraocular pressure

CLINICAL LABORATORY TESTS Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase

DRUG INTERACTIONS Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity There were no drug-related tumorigenic effects at any of the dosage levels Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug

PREGNANCY Pregnancy Category C Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose There are no adequate and well-controlled studies in pregnant women Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus

NURSING MOTHERS Propranolol is excreted in human milk Caution should be exercised when propranolol is administered to a nursing mother

PEDIATRIC USE Safety and effectiveness in children have not been established

Hydrochlorothiazide: GENERAL Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely Hyponatremia, hypochloremic alkalosis, and hypokalemia Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids Medication such as digitalis may also influence serum electrolytes Warning signs irrespective of cause are Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH

Interference with adequate oral electrolyte intake will also contribute to hypokalemia Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability) Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease) Dilutional hyponatremia may occur in edematous patients in hot weather, appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening In actual salt depletion, appropriate replacement is the therapy of choice

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy

Insulin requirements in diabetic patients may be increased, decreased, or unchanged Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy

Thiazides may decrease serum PBI levels without signs of thyroid disturbance

Calcium excretion is decreased by thiazides Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen Thiazides should be discontinued before carrying out tests for parathyroid function

DRUG INTERACTIONS Thiazide drugs may increase the responsiveness to tubocurarine

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient Thiazides may decrease arterial responsiveness to norepinephrine This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use

PREGNANCY Pregnancy Category C Thiazides cross the placental barrier and appear in cord blood The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult

NURSING MOTHERS Thiazides appear in human milk If use of the drug is deemed essential, the patient should stop nursing

PEDIATRIC USE Safety and effectiveness in children have not been established

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy

Cardiovascular Bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type

Central Nervous System Lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics

Gastrointestinal Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation; mesenteric arterial thrombosis, ischemic colitis

Allergic Pharyngitis and agranulocytosis, erythematous rash; fever combined with aching and sore throat, laryngospasm and respiratory distress

Respiratory Bronchospasm

Hematologic Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura

Auto-Immune In extremely rare instances, systemic lupus erythematosus has been reported

Miscellaneous Alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol

Hydrochlorothiazide:

Gastrointestinal Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis, sialadenitis

Central Nervous System Dizziness, vertigo; paresthesias, headache; xanthopsia

Hematologic Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia

Cardiovascular Orthostatic hypotension (may be aggravated by alcohol barbiturates, or narcotics)

Hypersensitivity Purpura, photosensitivity, rash, urticaria; necrotizing angiitis (vasculitis, cutaneous vasculitis), fever, respiratory distress, including pneumonitis, anaphylactic reactions

Other Hyperglycemia, glycosuria, hyperuricemia, muscle spasm; weakness, restlessness, transient blurred vision

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn

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Potential Usefulness of Monoclonal Antibodies in Invasive Ovarian Adenocarcinoma

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Routine uses of the monoclonal antibody OC-125 raised against the ovarian epithelial adenocarcinoma antigen CA-125 has proved useful in monitoring the clinical course of ovarian cancer patients post-operatively and while receiving chemotherapy. Serial measurements of serum CA-125 levels have correlated well with disease burden and the clinical course of ovarian cancer patients, and may be useful in predicting which patients will recur following completion of therapy after negative second-look operations. Routine use of this assay should be employed in order to improve our ability to monitor the efficacy of therapy both during and after treatment, and may be of great value preoperatively in selecting those patients with pelvic pathology most likely to have invasive ovarian cancer.

The past decade has witnessed great progress in the treatment of invasive ovarian cancer. Improved efforts at operative tumor reduction ("cytoreductive surgery") and the employment of Cis-platinum containing combination chemotherapy have resulted in improved complete response rates to therapy. Because of the aggressive surgical and chemotherapeutic approach, however, the majority of patients will have no clinical evidence of disease on physical examination and will have no parameter of disease to follow during treatment with which therapy can be monitored. Furthermore, patients who have undergone second-look surgery could previously not be offered any laboratory evidence that their disease truly was in remission until now. The development of monoclonal antibodies to ovarian tumor antigens may represent the first step in the long-awaited break-through in cancer research which, although not without limitations, may allow us to screen for and follow patients with ovarian cancer pre- and post-operatively.

The development of the ovarian monoclonal antibody OC-125 is a direct result of the work of Milstein and Kohler of Cambridge, England in 1975,[1] and is illustrated in figure one. By fusing B-lymphocytes obtained from the spleen of a mouse sensitized against a specific ovarian tumor antigen to mouse or human myeloma cells in a solution of ethylene glycol, special cells called hybridomas are formed. These calls retain the specific antibody production capacity of the particular lymphocyte yet can produce such antibody indefinitely utilizing the genetic machinery of the myeloma cells. Growth in specific culture medium selects out these hybridoma cells, and the best clones (*ie* those with the purest antibody production) of hybridoma cells can either be frozen or injected intraperitoneally into mice where they produce ascites which contains the specific antibody desired. The purity of the antibody in recognizing a given tumor will only be as specific as the tumor antigen the antibody is raised against. This technique allows for the production of large quantities of specific antibody for use as tumor markers in ovarian cancer.

Review of the current literature from other institutions reporting their experience with OC-125 has confirmed the usefulness of monoclonal antibodies in the immunodiagnosis of patients with ovarian epithelial cancers. Kabawat and Bast[2] initially determined the spectrum of reactivity of the murine monoclonal antibody QC-125 by noting that it recognized antigents on most malignant serous, endometrioid, clear cell, and undifferentiated tumors but failed to react with any mu-

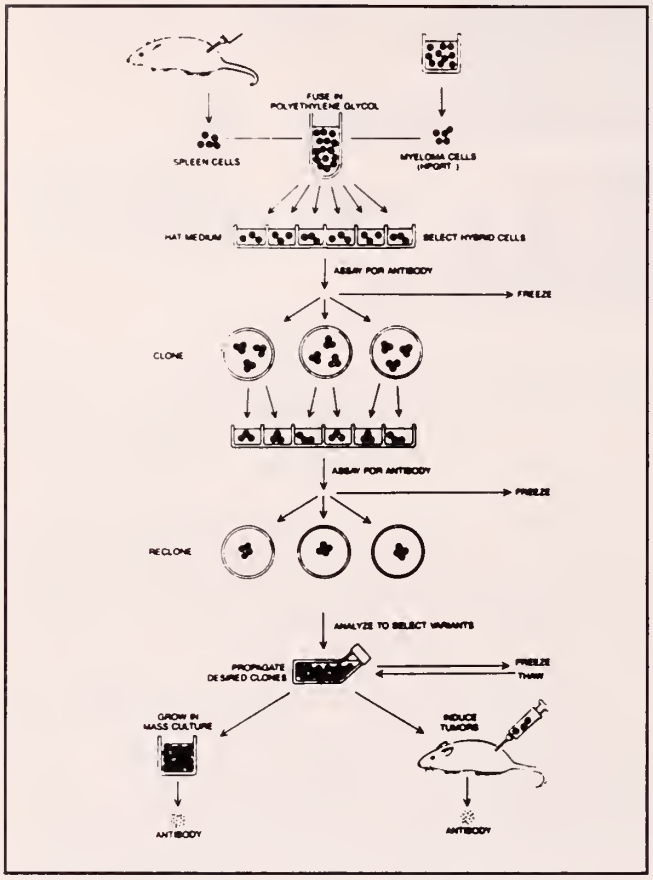

Fig. 1: Method of producing a monoclonal antibody such as OC 125.

TABLE I

CA-125 RESULTS — SCREENING

Subjects	% greater than 35 U/ml
healthy volunteers	1
nonmalignant disease	6
ovarian cancer	82
non-ovarian cancer	
pancreas	58
lung	32
GI	22
breast	12

TABLE 2

CA-125 CURRENT USES

1. Pre-op – to increase or confirm suspicion of malignancy
2. Pre—Post-op – to assess percent of tumor reduction
3. While on Chemotherapy – to monitor clinical response
4. After second-look – to detect recurrence

TABLE 3

CA-125 – POTENTIAL USES

1. early therapy selection
2. isotopic scanning
3. directing chemotherapy to cancer cells
4. refining pathologic impressions

TABLE 4

CA-125 – PROBLEMS

1. sensitivity not known
2. specificity good but could be improved
3. heterogeneity of tumors
4. expense ($50)

cinous tumors, Brenner tumors, or sex cord-germ cell cancers. Borderline tumors and benign serous ovarian tumors also reacted strongly. The degree of reactivity initially did not vary with the grade of the tumor, although tumors with more advanced stages generally had higher initial levels of tumor antigen. Previous studies[3] have already demonstrated the relative specificity of monoclonal antibody OC-125 for epithelial ovarian tissue by showing that the antibody reacted with all six epithelial ovarian cancer cell lines tested but only one of 14 cell lines derived from nonovarian neoplasms from a variety of normal adult tissues, including normal adult and fetal ovary.

Having established that the antigenic determinant OC-125 is expressed by more than 80% of ovarian epithelial carcinomas and is not present on the surface of the normal ovary, additional work established the "normal" reference level for the radioimmunoassay below which virtually every patient without malignancy will fail. Bast, *et al*[4] measures CA-125 levels in four groups of patients: healthy blood donors, patients with nonmalignant gynecologic disease (fibroids, endometriosis), patients with nongynecologic malignancies, and women known to have epithelial ovarian cancers. As can be seen from table I (detection of CA-125 antigen in serum), when a 35 units/ml reference level was used as the standard, 82% of 101 women with ovarian epithelial cancers had antigen levels above this value, whereas only 1% of 888 healthy male and female blood donors as controls had values which exceeded this as did only 6% of 143 patients with nonmalignant diseases. In addition, only 29% of 200 patients with nongynecologic neoplasms (pancreas, colon, breast) had levels in excess of 35 units per ml. This data strongly suggests that the CA-125 radioimmunoassay may be used preoperatively to help determine which female pa-

tients with pelvic pathology are likely to have ovarian epithelial malignancies. A high index of suspicion for ovarian cancer coupled with an elevated CA-125 antigen level obtained in our laboratory strongly suggests invasive ovarian cancer, and should enable the primary care physician to refer the patient to a gynecologic oncologist for appropriate workup and subsequent surgical staging and cytoreductive surgery.

Preliminary data from the Gynecologic Oncology service at the University of Louisville have shown that the majority (80%) of patients with invasive ovarian epithelial malignancies have elevated CA-125 levels preoperatively, and that with appropriate surgery and chemotherapy virtually all will enter clinical and laboratory remission with normal CA-125 levels.

CA-125 also has great potential for monitoring the clinical course of patients with invasive ovarian epithelial cancer. At present, 16 patients are on first-line combination chemotherapy following aggressive cytoreductive surgery; 15 out of 16 patients remain in complete clinical remission with CA-125 levels that are in the normal range within two to four courses of chemotherapy except for one patient with persistently elevated levels despite no evidence of disease, and one patient who developed massive progression of disease after only two courses of chemotherapy yet had paradoxically normal CA-125 levels. Eight patients have completed chemotherapy and undergone second-look laparotomy at which no cancer was found; seven of the eight patients remain in complete clinical remission with normal CA-125 levels after a median follow-up of 12 months (range six to 18 months). One patient without evidence of disease on clinical examination had an elevated level (5000 U/ml) six months after surgery and at re-exploration was found to have recurrent disease.

Seventeen patients failed first-line treatment by virtue of positive second-look surgery or progression of disease before planned surgery. Five of the six patients who failed first-line treatment had elevated CA-125 levels at the time of progression of disease was detected clinically, and never had normal levels at any point. There is little data in the literature as of yet which provides guidelines for predicting the likelihood of treatment failure with CA-125 levels that do not fall to normal within a certain period of time, but persistently elevated levels of CA-125 during first-line treatment seems to reflect tumor burden and may indicate that cancer will be found at second-look laparotomy.

CA-125 levels which fall to normal range during treatment and remain so up to time of second-look surgery unfortunately, do not guarantee that no disease will be found at surgery. On the Gyn/Oncology service at the University of Louisville, 10 patients had positive second-look surgery yet seven patients had normal CA-125 levels just prior to surgery. Experience at other institutions has also shown that although elevation of CA-125 levels may precede tumor growth or recurrence by one to six months and that persistently elevated levels usually reflect a tumor burden, normalization of CA-125 levels may or may not be associated with no tumor at second-look surgery. Investigators at the Dana Farber Cancer Institute in Boston[5] found that although persistently elevated CA-125 levels were associated with residual disease, only four out of 15 patients with normal CA-125 levels prior to second-look surgery were in fact without evidence of disease.

Thus, at the present time CA-125 levels cannot be used in lieu of surgery to confirm complete response to chemotherapy. However, routine use of OC-125 antibody to CA-125 ovarian tumor antigen may be an extremely useful tool preoperatively to select those patients with pelvic pathology who will most likely have ovarian cancer so that the appropriate workup and surgery may be instituted. Postoperatively, and during chemotherapy, elevated CA-125 levels may be of predictive value, and although normal values at the time of completion of chemotherapy do not guarantee complete surgical remission, elevation of the CA-125 level after completion of second-look laparotomy may indicate recurrent cancer before it is evident on physical examination or CT scan.

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Blunt Cardiac Trauma During Football

A Case Report

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A case is presented of a high school football player who developed chest pain and signs of cardiac injury by electrocardiogram and CK-MB analysis after a football game. The true incidence of this type of injury is unknown but appears to be underdiagnosed because of lack of suspicion, insensitivity of diagnostic tests and a seemingly benign prognosis. Evaluation of chest trauma should include electrocardiogram and cardiac specific enzymes with the additional use of two-dimensional echocardiography and Holter monitoring. The athlete should be instructed to avoid further competition for four to six weeks, until healing has occurred.

Blunt trauma to the chest resulting in cardiac contusion most often occurs as a result of automobile accidents, particularly the "steering wheel" injury. The incidence of cardiac trauma from this source alone is estimated at 900,000 cases per year.[1] Other causes of blunt cardiac trauma include crush injuries to the chest, falls and overpressure from blasts or blows to the abdomen. Although rarely reported, cardiac injury secondary to blunt trauma sustained during athletic activities is known to occur.[2,3,4] Many people are involved in organized sports that involve some contact, especially football, and are exposed to various degrees of trauma. The reported incidence of cardiac involvement in blunt chest trauma varies from 6-76%[5-7] which suggests that a large number of cardiac injuries are going undiagnosed. It is unusual that there has been only one reported case of cardiac injury sustained while playing football.[4] A case is presented of a young man who developed chest pain after playing in a football game and when evaluated further showed signs of cardiac injury. A greater awareness of this problem along with more extensive routine evaluation may reveal this to be a more significant problem than previously believed.

Case Report

The patient is a 17-year-old high school junior who was struck on the left chest by an opposing player's shoulder pad and helmet during a football game. Despite mild shortness of breath and chest pain, he continued to play without incident. Several hours after the game he presented to an emergency room complaining of a persistent dull ache over the left chest. The pain was non-radiating, somewhat worse with inspiration and was associated with persistent shortness of breath. He had no prior significant medical history. Physical examination revealed a well-nourished, well-developed black male in mild distress. Blood pressure was 140/70 mm Hg, pulse was 62 and regular and respirations were 20. Cardiac examination consisted of normal first and second heart sounds with no murmurs, gallops or rubs noted. There was discoloration over the left chest with a small hematoma over the left clavicle. An electrocardiogram was performed which showed normal sinus rhythm and voltage criteria for left ventricular hypertrophy. Although the patient had ST segments consistent with early repolarization in some leads, he had ST segment elevation and T wave inversion anteriorly consistent with subepicardial injury and ischemia (Figure 1). X-rays of the chest, left ribs and left clavicle were normal. The patient was admitted and monitored.

Laboratory analysis showed elevation of total creatine kinase (CK) with an abnormally elevated CK-MB fraction as a percent total CK at 12 hours (Table I). Although total CK was still elevated at 36 hours, the percent CK-MB had returned to the normal range. Other enzymes indicative of skeletal muscle trauma, glutamicoxaloacetic transaminase and lactate dehydrogenase, were only minimally elevated (Table I). The patient was monitored for 36 hours during which time he showed only occasional premature atrial contractions. A repeat

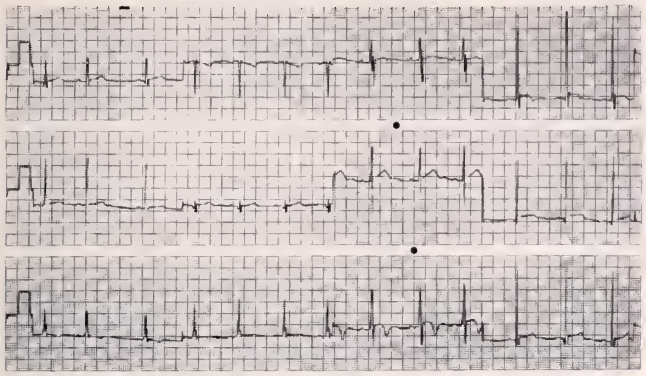

Fig. 1: The electrocardiogram performed in the emergency room on September 25 at 03:30 showed normal sinus rhythm, voltage criteria for left ventricular hypertrophy, ST segments consistent with early repolarization and ST elevation and T wave inversion anteriorly consistent with subepicardial injury and ischemia.

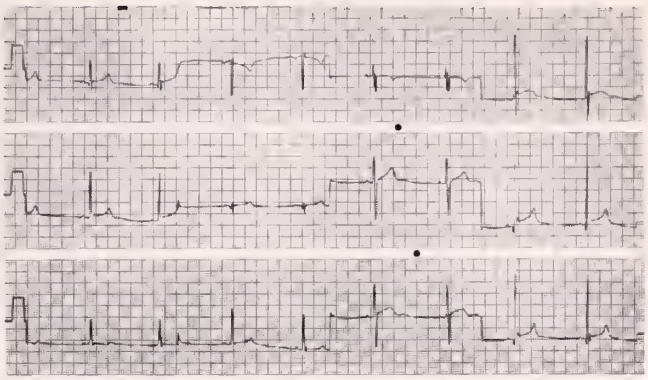

Fig. 2: The electrocardiogram performed on September 26 at 07:00 showed resolution of the T wave inversion anteriorly. The ST elevation is consistent with early repolarization and/or pericarditis.

electrocardiogram done the day after admission showed resolution of the T wave abnormalities but persistent ST segment elevation consistent with pericarditis or early repolarization (Figure 2). An M-mode and two-dimensional echocardiogram was performed which showed no pericardial effusion or wall motion abnormalities. The pain resolved and the patient was discharged and advised to refrain from strenuous activity for a month and avoid competitive sports for the remainder of the season.

Discussion

No physician is exempt from the treatment of chest trauma yet the recognition and treatment of blunt injuries of the heart is often incomplete. It is a well known and common occurrence in automobile accidents when blows to the chest can be quite severe. Autopsy studies of unselected vehicular accident victims have disclosed myocardial contusion in 15% to 17%.[8] Damage to the heart is rarely suspected or diagnosed when less severe trauma is involved, such as during athletic events. It has been shown that relatively minor blows to the chest can cause cardiac damage.[7,9] In fact, forces sufficient to cause cardiac injury can be transmitted through the abdomen or chest wall without rib or sternum fracture.[7,8,9] Cardiac lesions from blunt trauma include myocardial contusion and rupture; valvular injury, damage to coronary arteries, rhythm or conduction disturbances and pericardial injury.[8]

Athletes are frequently struck in the chest or abdomen with knees, elbows, shoulders or heads and often fall on their chest during the course of contact sporting events. It is customary for the athlete or coach to treat such injuries lightly and only address the problem if bony structures are fractured or bruised. As a result, cardiac trauma from athletic events has been reported rarely, but these reports include direct blows from fists,[1] baseballs[2,3] and a helmeted head.[4] No information is available as the the true incidence of cardiac injury occurring during contact sports.

Diagnosing myocardial contusion is difficult because of lack of sensitivity and specificity of most of the diagnostic tests used. The electrocardiogram is sensitive, reportedly being abnormal in up to 80% of suspected contusion.[5,9] Holter monitoring often detects ventricular ectopy, heart block and arrhythmias.[5,9] Measuring CK-MB level as a percent of total CK appears to be most specific for myocardial damage.[10] Total CK blood levels are often elevated due to associated skeletal muscle trauma. Looking at total CK-MB levels can be misleading since CK-MB activity is known to exist in skeletal muscle. A recent report showed 44% of a group of football players who had no history or evidence of chest trauma had elevated total CK-MB levels after a game but all levels were normal when taken as a percent of total CK activity.[11] Two-dimensional echocardiography has been shown to be specific for cardiac trauma, often detecting effusions, mural thrombus, wall motion abnormalities, and valve disruption.[5,6] Technetium pyrophosphate scintigraphy can be useful since contusion is often located anteriorly where scintigraphy is most sensitive.[5]

This patient had evidence of cardiac injury detected by electrocardiogram and also had CK-MB elevation out of proportion to total CK elevation suggesting myocardial damage and not just pericarditis or skeletal muscle

TABLE I

	CPK 34-188 IU/L	% MB 0-3	SGOT 7-37 IU/L	LDH 82-162 IU/L
9/25 03:30	1880	3.5	53	330
9/25 07:30	1685	4.0	42	—
9/26 07:00	1243	1.0	—	—

CPK – Creatinine Phosphokinase
% MB – Percent MB isoenzyme
SGOT – Serum glutamic-oxaloacetic transaminase
LDH – Lactate Dehydrogenase

damage. Continuous monitoring and echocardiography revealed no further abnormalities.

The extent of the problem of sports related cardiac injury is unknown. Myocardial contusion is generally felt to carry a good prognosis when isolated and uncomplicated, although long term prospective studies have not been performed. Reports of sudden death in football players appear occasionally and often no clear etiology is found. The most common cause of sudden death in young athletes is hypertrophic cardiomyopathy,[12] but 3% of sudden death in competitive athletes remain unexplained.[13] Subclinical myocardial injury leading to cardiac electrical instability is possible. Improved methods of protecting the thorax may decrease the chances of this type of injury occurring.

Players complaining of chest pain who have suffered blows to the chest or abdomen should be evaluated for cardiac injury. An abnormal electrocardiogram or high percentage of CK-MB activity is suggestive of cardiac injury and warrant further investigation. Avoiding further competitive sports and other strenuous activity for four to six weeks until healing has occurred, appears to be appropriate.

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Hearing Aids for Children: A Primer for Physicians

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In a companion article published earlier in the JKMA, the authors (DRC and TMG) presented basic information concerning hearing aid use by adults. The present article builds on that information by extending the discussion to include the pediatric population. This paper will include a discussion of: (1) the classification, etiology and incidence of hearing impairment in the pediatric population; (2) the effects of both mild and severe hearing loss on speech and language development; (3) candidacy for and goals of amplification; (4) amplification and assistive listening devices in the classroom; and (5) otological considerations and contraindications. This article is aimed primarily at pediatricians and those physicians in general or family practice.

Incidence and Etiological Classifications of Hearing Impairment in the Pediatric Population

"Hearing impairment refers to a decrease in hearing sensitivity sufficient to impair normal aural-oral communication. The degree of hearing handicap is the result of the degree of deviation in hearing sensitivity or auditory discrimination interacting with other factors including age of onset, age of detection and intervention, duration of hearing loss, type of pathology, the use of amplification, habilitative or educational programming, family support mechanisms and the child's own compensatory or adaptive abilities."

As this definition implies, one cannot simply identify hearing impairment with a fixed amount of hearing loss measured in decibels. A myriad of factors determine the amount of "handicap" produced by any given hearing loss. These include age of onset, type of hearing loss, age of diagnosis, cognitive factors, use of amplification and parental and family support. Hearing loss may be classified according to age of onset, *ie*, congenital or pre-lingual (occurring before the full development of speech and language) vs. pre-vocational (occurring before the chronological age of 19 years). Profoundly different consequences for the child or adolescent are seen depending on the age of onset. Those with congenital or pre-lingual hearing loss of sufficient magnitude may not develop speech and oral language at all. Those with pre-vocational hearing loss may have a good language structure but be unable to communicate in an auditory-oral mode without some assistance (*ie*, amplification, sign language). Hearing loss may be further classified as being conductive or sensorineural. Conductive hearing loss is a problem primarily with the external or middle ear whereas sensorineural losses are due to problems originating in the cochlea or neural pathways.

In terms of etiology, a number of studies suggest that about one-third of all sensorineural hearing losses in children have a genetic component, one-third are derived from exogenous causes in either the prenatal, perinatal or postnatal periods, and about one-third have unknown etiologies.[2,3,4,5] An increasingly recognized etiology of postlingual sensorineural hearing loss is meningitis. In some studies, the increase is as high as 25-30%. The most common etiology of conductive hearing loss is otitis media with effusion. Most children with this disorder are found to have mild hearing impairments averaging 25dB.

One of the best estimates of the prevalence of hearing impairment among public school children was derived from a study of Pittsburgh school children.[6] It was found that 1.7% of children five to 10 years of age had losses greater than 26dB. A larger study of children in Sweden yielded a prevalence rate of 4%.[7] A similar study[8] found a prevalence of 3% for children failing a 20dB hearing screening test. Professionals in audiology and otology generally hold that 3% to 5% of the school age population manifest some degree of hearing impairment, while approximately 0.2% are severely and bilaterally impaired or deaf. The majority of the mild temporary losses are conductive in nature and due to otitis media with effusion. The incidence of temporary, conductive hearing loss decreases with age, while permanent defects, particularly high frequency sensorineural hearing loss, increase with age. The incidence of hearing loss is significantly higher in certain special populations. Among the institutionalized retarded the incidence is 22% to 55%.[9] Children with unrepaired cleft palates almost

TABLE 1

REALISTIC ESTIMATE OF PREVALENCE OF HEARING LOSS IN CHILDREN (PG. 18 AND PG. 20 IN NORTHERN AND DOWNS (3RD ED.))

Age	Percent with Bilateral Loss 15dB	Percent with Unilateral Loss 15dB	Total
0-12 mo	4.2	8.4	12.5
12 mo-2 yr	5.2	10.8	16
2-3 yr	4.3	8.6	13
3-4 yr	4	8	12
4-5 yr	4.1	5.1	9.2
6-7 yr	1.7	4.6	6.3
8-9 yr	1.1	3.7	4.8
10-11 yr	1.9	4.5	6.4
Average prevalence: 10%, birth to 11 yr			

Degree	Age at Onset	Number	Percent Prevalence
All hearing impairment	All ages	13,362,842	6.6
Significant bilateral	All ages	6,548,842	3.2
Deafness	All ages	1,767,046	0.87
	Prevocational	410,522	0.2
	Prelingual	201,626	0.1

always have concommittant middle ear effusions and resultant conductive hearing losses. Prematurity is also associated with an increased risk of hearing loss. Venon[10] found 257 premature births among 1468 applicants to the California School for the Deaf which represented a prevalence rate of 17.4%. (See Table 1 for Northern and Downs'[11] summary of prevalence data.)

Effects of Hearing Loss on Speech and Language Development

As stated earlier one cannot simply predict the degree of communicative handicap from the amount of hearing loss because of the influence of so many other variables.[12] We do know, however, that hearing impairment has a significant effect on speech and language development. Children with congenital or prelingual sensorineural hearing loss in whom amplification is delayed for several years will generally have more difficulty with speech and language development than children with fluctuating middle ear problems.[13,14] The age at which a diagnosis of hearing loss is made and treatment intervention is begun exerts a considerable influence on the ultimate effect of hearing impairment on language acquisition. The maximum potential for linguistic competence decreases the longer intervention is delayed.[15]

The literature has demonstrated that severely hearing impaired and "deaf" speakers have poor speech intelligibility, making it difficult for the average listener to understand their speech. Speech intelligibility appears to be partially correlated with degree of loss; the better the audiogram the higher the probability of increased intelligibility.[16,17]

The abnormal articulation skills of the deaf and hearing impaired speaker have been well documented. Vowel sounds are produced with imprecise tongue placement.[18] Vowel duration is longer than those of the normal speaker. Consonant errors occur in three different types; the most prevalent type of error being that of omission. The hearing impaired speaker often omits the final sound of words.[19] Other frequently omitted sounds are tongue tip sounds (*ie*, /t/ and /d/), fricatives (*ie*, /s/ and /v/) and affricates (*ie*, /ch/). Substitution errors are generally a change in manner of articulation. That is, the child will substitute stops (*eg*, /p/) for fricatives and affricates. Another frequent articulation error is that of distortion. Here the speaker closely approximates the sound they are trying to produce but, because of the hearing loss, produces the sound as they hear it rather than as it should be. Distortions are usually affected by improper duration of the speech sound in question.

In addition to articulation disorders the language of the deaf and hearing impaired is also significantly affected. Markides[20] found that the vocabulary of hearing impaired children is depressed between two and three years, while vocabulary skills of deaf speakers are delayed approximately four to five years. As the hearing impaired child gets older, the vocabulary gap increases.[21] Because of their language deficit, deaf and hearing impaired children tend to be very concrete thinkers. They will therefore often have difficulty dealing with abstract concepts such as synonyms, ambiguities, jokes, and other language concepts where what is spoken is not what is meant. Mastery of these abstract concepts is essential for academic success.

Battin[22] and Miller[23] state that children who have frequent episodes of otitis media in the first two years of life are at "high risk" for becoming language-learning disabled. This is thought to occur because the fluctuating hearing loss occurs in the important language and speech development years. Lehman[24] reported that children with three episodes of chronic otitis media, with the first occurring before 18 months of age, had an overall expressive language and speech delay when compared to their own receptive language abilities. Children with early histories of otitis media present

deficits in all or some of the following speech and language areas: auditory sequential memory, auditory blending, auditory synthesis, vocabulary, grammar, syntax, and articulation development.[25,26,27,28] The same abstract reasoning problems seen in the deaf and severely hearing impaired populations may be evident in children with a history of unremitting chronic otitis media. These children may develop learning disabilities, reading, spelling and/or math problems. Since their disability is not as obvious as that of the deaf or severely hearing-impaired child, it is often not identified until later in their academic life. In these cases, *remediation* tends to be reactive rather than proactive. The more severe the loss and the longer (re)habilitation is withheld, the greater the probability of the child having permanent severe speech and language deficits. Early detection and intervention and aggressive otologic management are the keys to success for this group of children.

Goals of Amplification

The primary goal of amplification is to restore the child's hearing to as near normal as possible. This does not mean merely improving his ability to detect pure tones more readily. Rather, it means improving the child's ability to *hear and understand* speech in both quiet and noisy environments (*ie*, the classroom). Important related goals include providing sufficient and clear amplification (1) to maximize auditory skills development, (2) to insure adequate auditory input for age-appropriate language development and speech intelligibility, and (3) to enhance the child's academic success. The fitter must also choose an amplification system that is cosmetically acceptable, durable and comfortable. These goals can only be achieved with the complete cooperation of the parents, teachers, school officials, physician and audiologist.

Candidacy for Amplification

A growing body of research literature suggests that even children with early, recurrent or persistent mild hearing loss are at risk for inadequate speech and language development, delayed intellectual development, and impaired listening skills.[25,26,29,30,31,32] Virtually every child with a persistent average hearing loss of 20dB (re: Hearing Level) or more is a potential candidate for either part-time or full-time hearing aid use if, and only if, medical/surgical treatment has proven to be unsuccessful in restoring normal hearing. The upper limits of normal hearing for children is defined as average hearing thresholds in the 500 Hertz through 4000 Hertz frequency range of 20 decibels (re: Hearing Level). A child with fluctuating hearing loss secondary to middle ear effusion or infection is considered at risk for poor language and auditory skills development if his hearing thresholds remain worse than 20dB for weeks at a time throughout the school year. Northern and Downs[11] recommend even more aggressive criteria for amplification in children under the age of two years who have consistent bouts of otitis media: 1) hearing level of 15dB or greater, 2) chronic otitis media more than half the time for a period of six months, in whom medical and/or surgical treatment has been unsuccessful in restoring hearing, 3) fluctuating hearing levels from 0dB to 15dB more than half the time for one year. Further evidence of the need for intervention would come in the form of: 1) teacher reports of "inattentiveness," 2) reports of "behavior problems," 3) a decline in academic performance, and/or 4) the existence of a speech or language disorder or delay.

What about children at the far end of the audiometric spectrum — those with more severe hearing loss? Can a hearing loss be so profound that a hearing aid simply won't help? One rarely sees a child who is absolutely deaf. Most have at least some residual hearing sensitivity if even in the lower test frequencies (ie, 250 Hertz and 500 Hertz). These patients can and do benefit from powerful hearing aids designed to amplify the lower frequencies. Although the patient's ability to discriminate between the important high frequency consonant sounds is generally not improved in this process, their ability to hear the prosodic elements of speech (ie, rate, rhythm and intonation) is improved. These acoustic cues do help the patient lip-read conversation more easily. These also assist the child in monitoring the loudness and pitch of his own voice. Even these limited cues are important in the development of auditory-oral communication.

The child with perfectly normal hearing in one ear and severe or profound hearing loss in the other ear may also be a candidate for amplification in the form of a C.R.O.S. (contra-lateral routing of signal) hearing aid. This type of aid utilizes a microphone pick-up on the poorer ear and routes sounds that come to that ear across the head to the better ear. Pseudo-binaural hearing is thus achieved. Recent research supports the use of C.R.O.S. amplification for children with severe unilateral hearing loss.[33]

Assistive Listening Devices

The typical classroom is a relatively noisy place. Ambient background noise levels often reach 76dB of sound pressure level with averages well over 65dB.[34] The classroom is also a listening environment with a great deal of acoustical reverberation. The combined effects of background noise and reverberation create a difficult listening situation for the hearing-impaired student. Still another critical variable is talker-to-listener distance. The child might easily be 30 feet from the teacher in a typical classroom. The "inverse square law" of acoustics tells us that the sound level drops 6dB for every doubling of distance from the source of the sound (talker). Distance alone, therefore, provides an additional barrier to effective classroom communication.

Well-fitted personal hearing aids are only a partial solution to these problems. The personal hearing aids may amplify not only what the teacher is saying but also the reverberant background noise. This dilemma is compounded by the distance between talker and listener. In recent years new solutions have been found for these problems. Technology has provided the clinician a whole series of "Assistive Listening Devices" (ALD) for classroom use. The primary objective of the ALD is to improve the signal-to-noise ratio in the classroom. This is achieved by figuratively "moving" the child closer to the teacher. The teacher wears a wireless microphone which transmits a high fidelity signal via either FM radio waves or invisible infra-red light waves to a special receiver worn by the child. The child's receiver is "tuned" to the microphone broadcast frequency. This, in effect, reduces the talker-to-listener distance to just a few inches (*ie*, the distance between the talker's mouth and the broadcast microphone). Assistive listening devices are available at reasonable cost in a variety of configurations. Their use in the academic setting is becoming increasingly widespread.

Medical Contra-Indications for Hearing Aid Use

Every child with a hearing impairment should be evaluated thoroughly by a pediatrician or family practitioner and an otolaryngologist prior to consideration of a hearing aid. There are very few medical contraindications to amplification. It is important, however, to rule out medically or surgically treatable disorders such as chronic otitis media with effusion or cholesteatoma. Children with conductive hearing losses are more likely to have treatable disorders than those with sensorineural impairments. Since one-third of sensorineural hearing loss can be genetic in origin, consideration should be given to referring the child with this type of hearing loss to a geneticist for evaluation. This is important for counseling the child's parents as well as for delineation of syndromes and mode of inheritance.

Summary

Amplification systems are an essential aspect of the total (re)habilitation of the hearing-impaired child. The absolute amount of hearing loss is less important than the child's communicative needs with respect to his candidacy for amplification. The child with uncorrected hearing loss is at risk in several important areas: speech and language development, academic achievement, psycho-social development and eventual vocational choices. Optimal treatment consists of (1) early diagnosis and exclusion of medically or surgically treatable disorders, (2) very early education and (re)habilitation, (3) early amplification and (4) close cooperation between and among parents, clinicians and educators. It is important for the primary care physician to be cognizant of the consequences of hearing impairment in the pediatric population, and to be aware of referral sources in rendering the highest possible level of care to this group of children.

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Psychogenic Water Intoxication

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Psychiatric patients have a heightened vulnerability to self-induced water intoxication. The laboratory examination typical of this disorder is a low serum sodium. Water intoxication is usually associated with inappropriate secretion of anti-diuretic hormone, and may develop secondary to malignancies and certain medicines. Anti-diuretic hormone levels, however, may be normal in self-induced water intoxications. Polydipsia can precepitate hyponatremia, and thiazide diuretics may exacerbate this tendency. It is possible that psychosis may alter the anti-diuretic hormone osmostat to favor the development of hyponatremia. In mild cases, fluid restriction is the main treatment modality. Occasionally, hypertonic saline is needed to correct hyponatremia in more severe cases with seizures or coma. Demeclocycline may be useful in the prophylaxis of recurrent episodes of water intoxication. The fluid intake of psychotic patients with hyponatremia needs close monitoring and frequently requires one-to-one observation to enforce fluid restrictions.

Reports of water intoxication induced by compulsive water drinking appear with some regularity in the medical literature. The first two cases of water intoxication were described in 1935.[1] These cases and a subsequent one in 1938[2] had been iatrogenically induced. The first documentation of self-induced water intoxication in a psychiatric patient was published also in 1938.[3] Compulsive water drinking is not rare among psychiatric patients. This behavior was reportedly observed in 16 out of 239 patients (6.6%) hospitalized in a state hospital, with half of these patients having symptoms of water intoxication.[4] This condition mandates prompt, correct diagnosis and management since it may result in serious sequellae (*eg*, seizure or delirium) or even a fatal outcome.[5,6,7]

Most cases of water intoxication are associated with inappropriate secretion of anti-diuretic hormone. The syndrome of inappropriate secretion of anti-diuretic hormone (SIADH) results from excessive water retention which persists despite a concurrent reduction in the osmolality of extracellular fluid.[8] The typical features are summarized as follows: (a) hyponatremia with hypo-osmolality of the serum and extracellular fluid; (b) continued fluid volume expansion; (c) normal skin turgor and blood pressure; (d) osmolality of the urine greater than that appropriate for the concomitant tonicity of the plasma, that is urine less than maximally dilute; (e) normal renal function; and (f) normal adrenal function.[8] Atypical cases of SIADH may result in urine tonicity below that of serum, without sodium loss. In such cases the urine is less than maximally dilute. In contrast to routine SIADH patients, people with polydipsia of exclusive psychogenic origin excrete urine that is near maximally dilute, the specific gravity ranging from 1.000 to 1.003. If anxiety or other factors increase the release of antidiuretic hormone in patients with water intoxication due to psychogenic polydipsia, urinary osmolality change may not occur, and differentiation from classical SIADH may be difficult.[8]

Case One

A 37-year-old single white male was hospitalized in a psychotic state because he threatened his father with a shotgun. The past history revealed chronic schizophrenia since age 23. He was discharged one month prior to this admission with a diagnosis of schizophrenia and water intoxication. Recent medications, haloperidol 10 mg qid and diphenhydramine 25 mg bid, were continued during this hospitalization. Because of a blood pressure of 200/112 on admission, hydrochlorathiazide 50 mg daily was prescribed. Initial laboratory examinations revealed the glucose, urea, potassium, carbon dioxide, creatinine, blood count and urinalysis as normal, and included a urine specific gravity of 1.003. The serum sodium, however, was low at 125 m mol/l. On the third hospital day because of a serum sodium

at 109 m mol/l more evaluations were performed. Urine electrolytes and osmolality revealed the following: sodium 23 m mol/l, potassium 91 m mol/l, chloride 36 m mol/l and osmolality 107 m osm/kg. Five hundred ml of 3% normal saline and furosemide 40 mg. intravenously were administered. Hydrochlorathiazide was discontinued and oral fluids restricted.

That same day the serum sodium returned to 123 m mol/l. Fluids were limited to 500 ml/day. With continued water restriction, the serum sodium rose to 134 m mol/l by the 14th day. Throughout his hospital course the patient resisted treatment efforts and demanded water. Only close staff supervision prevented unlimited access to fluids. As he recovered there was no further evidence of hyponatremia. Because of the psychosis chlorpromazine was prescribed and the patient responded well. He remained on neuroleptics with improved mental status in follow-up with a normal fluid and electrolyte balance.

Case Two

A 45-year-old single black male with chronic schizophrenia was brought to the hospital by his sister because he had been losing track of time and was drinking excessive quantities of water. The patient claimed that nothing was wrong, but he acknowledged hearing voices. In spite of the psychosis, he was oriented with a clear sensorium. A grand mal seizure occurred following admission. Routine laboratory values were all normal except a serum sodium of 115 m mol/l; the urine specific gravity was 1.010.

Subsequent to the seizure the patient immediately received 5% dextrose with normal saline at 125 ml/hr and furosemide 80 mg., intravenously. Phenytoin, 400 mg. daily was started and oral fluids were restricted to 800 ml daily. By the third hospital day the serum sodium rose to 128 m mol/l with a urinary sodium excretion of 52 m mol/l (normal 40-220 m mol/l). On the next day oral fluids were liberalized to 1500 ml/day. The serum sodium returned to near normal limits, but on the sixth day the sodium again declined to 115 m mol/l. Serum osmolality then was 234 m osm/kg (normal 280-295 m osm/kg) and urine osmolality was 211 m osm/kg (normal 390-1090 m osm/kg). Normal saline was intravenously restarted at 125 ml/hr and was followed by 3% saline 250 ml for three hours. Oral fluids were limited to 800 ml daily. The next morning, the serum sodium was 130 m mol/l with the other electrolytes in the normal range. A six hour fluid restriction revealed that the patient was able to concentrate urine and serum. During this period the serum osmolality was 260 m osm/kg and the urine osmolality became 443 m osm/kg. With correction of the hyponatremia, there were no further problems. The patient was discharged on neuroleptics in better condition to the outpatient clinic.

Discussion

Hyponatremia can be a vexing problem in clinical practice. A systematic workup is required for an accurate diagnosis. Simultaneous assays of plasma and urine osmolalities and electrolytes aid this process. Appropriate treatment plans depend on the proper diagnosis.

Thiazide diuretics decrease urine volume and increase urinary osmolality during water diuresis.[9] During such treatment thiazides cause a relatively greater excretion of sodium than water. Hyponatremia with water retention can result from the recognized effect of thiazide diuretics to limit urinary diluting capacity.[10,11]

Treatment of elevated blood pressure in the first patient before appropriate workup proved to be an error. Hydrochlorathizide contributed to the hyponatremia which precipitated the seizure after admission. Antihypertensive treatment should never follow one high blood pressure reading. A serum osmolality was not obtained. This compromised the differential diagnosis of hyponatremia. The administration of furosemide together with hypertonic saline with a serum sodium of 109 is usually not recommended. Intravenous hypertonic saline alone is the accepted practice to correct severe hyponatremia. Fluid restriction is the best treatment for moderate hyponatremia.

The second patient may have had atypical SIADH. A urinary specific gravity of 1.010 is less than maximally dilute for a polydipsic patient. Such persons usually have urinary specific gravities of 1.003 or less. Our patient may have been wasting enough sodium to precipitate water intoxication and several days later be able to excrete a normally concentrated urine in response to water deprivation. SIADH would more appropriately be assessed by a water loading test.[12]

Polydipsia per se, rarely produces dilutional hypoosmolarity without an associated SIADH. To demonstrate the absence of SIADH in polydipsic patients, multiple determinations of urine osmolality and plasma anti-diuretic hormone over the full range of plasma hypoosmolarity are necessary. To exclude SIADH, it must be shown that plasma anti-diuretic hormone and urine osmolality, remain maximally suppressed until plasma osmolality returns to normal.[13] Neither of our reported

cases have this precise data; therefore, neither case is adequate to support the unusual findings of water intoxication resulting from polydipsia exclusive of SIADH.

The fall in the second patient's sodium to 115 mol/l despite fluid restriction of 1500 ml per day can only be explained by the ineffectiveness of the order. Despite being on a closed psychiatric ward the patient was not monitored on a constant one-to-one basis. Bathroom visits were not supervised. In this psychotic patient an order to limit fluids resulted in no actual fluid restriction. Presumably he drank large quantities of water.

What mechanisms might be operative in water intoxication? Because of the kidney's capacity to excrete up to 1000 ml of urine per hour, a psychotic process is a frequent prerequisite to self-induced water intoxication. In addition to the psychosis, hypothalmic dopamine receptor super-sensitivity has also been postulated as an important contributor to water intoxication.[14] Direct studies of dopaminergic super-sensitivity focusing on the chemoreceptor trigger zone are needed to verify this hypothesis. Osmoreceptors in the hypothalmus are extremely sensitive to changes in plasma osmolality. At approximately 280 osm/kg, plasma anti-diuretic hormone decreases, to allow the excretion of a maximally dilute urine. Normally, an excess of water intake produces a rapid climb in free water excretion, inhibiting anti-diuretic hormone. Postulated is a set point in the body governed by osmoreceptors.[15] This has been termed the anti-diuretic hormone osmostat. Alterations in this control mechanism have been associated with a variety of diseases,[15] fluphenazine,[16] and tobacco.[17] Both of our patients were heavy smokers. It is possible that psychosis, itself, may in some individuals alter the set point of the anti-diuretic hormone osmostat to favor the development of hyponatremia.[18]

There are several treatment considerations for water intoxication. Limiting fluid intake is the primary therapy. Since this syndrome is a potentially fatal condition,[5,6,7] the psychotic water intoxicated patient's fluid restriction must be rigidly monitored. Strict chaperoning of toilet visits is mandated until the hyponatremia resolves.

Based on anecdotal information, neuroleptics have been reported to induce inappropriate release of anti-diuretic hormone.[16] If possible, these drugs should not be prescribed until the hyponatremia is corrected. Extreme agitation or dangerous behavior may be an exception.

What are the clinical indications for more vigorous correction of hyponatremia? Delirium, coma, convulsions or severe hyponatremics are indications for intravenous hypertonic saline.[19] Lastly, demeclocycline may be useful in the prophylaxis of recurrent episodes of water intoxication in selected patients with polydipsia and intermittent sodium loss. Demeclocycline, a tetracycline derivative, inhibits antidiuretic hormone activity at the renal tubule. The most effective average dose is 1,200 mg per day. In addition to preventing hyponatremic episodes, demeclocycline may also facilitate recovery from hyponatremia. Its side effects include nausea, photo-sensitivity and very rarely a progressive renal insufficiency.[20]

In conclusion, any changes of sensorium in patients or the occurrence of a seizure should prompt clinicians to consider water intoxication in their patients. Such an abnormal mental status requires close screening for electrolyte imbalances, such a hyponatremias. The psychiatric presentations may vary from mild confusion to overt delirium or coma regardless of whether psychosis, depression or anxiety are also documented. Hyponatremia is easily diagnosed and treated when properly managed; however, misdiagnosis or mismanagement may result in severe complications or death.

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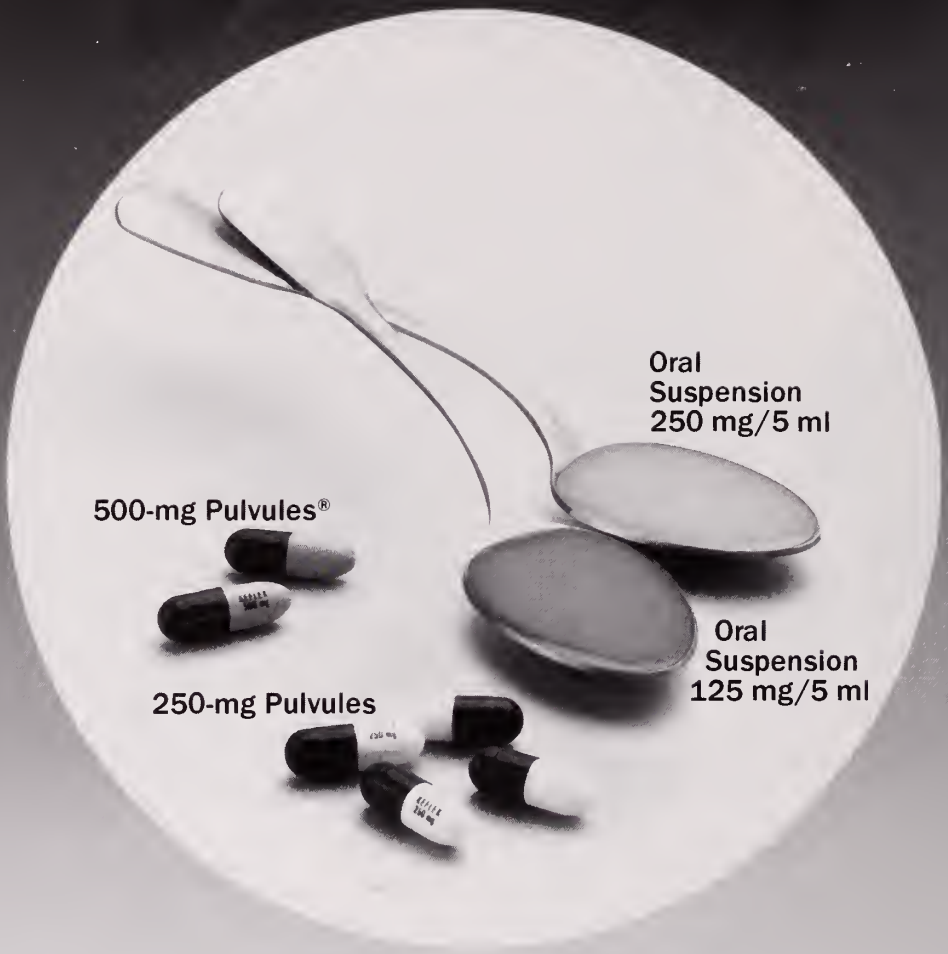

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In War: Resolution
In Defeat: Defiance
In Victory: Magnanimity
In Peace: Goodwill

The ringing phrase above shows only a portion of the oratorical splendor of Sir Winston Churchill. The above was uttered in 1946. Do the same words apply in today's medical arena? Are we in a war? If so, against whom? Certainly not the patient, he is our ally. He may be caught in No Man's Land but he is clearly on our side.

Maybe the hospitals? Well, I don't know! Hospitals will wax and wane between pressure from insurance companies, Medicare, Medicaid, HMO's and government regulations on one side to the medical staff and private practitioners on the other side. Hospitals must survive. As bricks and mortar, they are not as mobile as the fickled medical staff, hence must develop changing strategic plans to remain solvent. Hospitals are not turncoats, but the colors they fly from the windows certainly are determined by who is holding the town at the moment.

Medicare is a real quisling. Conceived in 1960 by the Great Society to offer excellence of care to all over 65-years-old. The public never resents being offered the best of anything, they just don't like paying for it. So Medicare in its wisdom decides to offer the best of everything to anybody who wants it, but then when even the government can not afford it they begin to offer an ersatz form that no one is happy with. A monumental bequeath while the going is good and monies are available. Now watch as HCFA bails out as the tide turns and casualties begin to mount.

If what I write above sounds of defiance, it is because of a fear of defeat. Not so much a defeat for me or my colleagues or of medicine, but a defeat for the consumer who relies on us for his good health. When a patient has a need it is the doctors phone that rings not the phones at HCFA nor the U.S. Senate building.

Magnanimity and Goodwill are two wonderfully resonant words that suggest good dealings. But who holds the deck to deal these cards? The government who looks after the budget or medicine who cares for the patient? The insurance companies that must show a good balance sheet or the bedside clinicians on the firing line everyday?

Maybe we can never return to the salad days of yore but neither should we turn medicine into an unrecognizable rubble. American medical prowess clearly leads the rest of the world. Thanks in part to past generous governmental grants-in-aid. But equally contributory have been the private sector, individual research and pharmaceutical houses.

So the battle goes on. The field is not always level. Most of the rules are made by government, so they can change with the tide of events. I hope our voices can be heard over the din.

Milton F. Miller, M.D.

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Dear Doctor Stewart:

I read with great interest and sympathy your very elegant editorial "Excellence" in the recent *Journal of the KMA*. I would strongly suspect that it reflects very much the ideas and attitudes of many of us "older guys."

Sincerely yours,
Andrew M. Moore, I.M.D.

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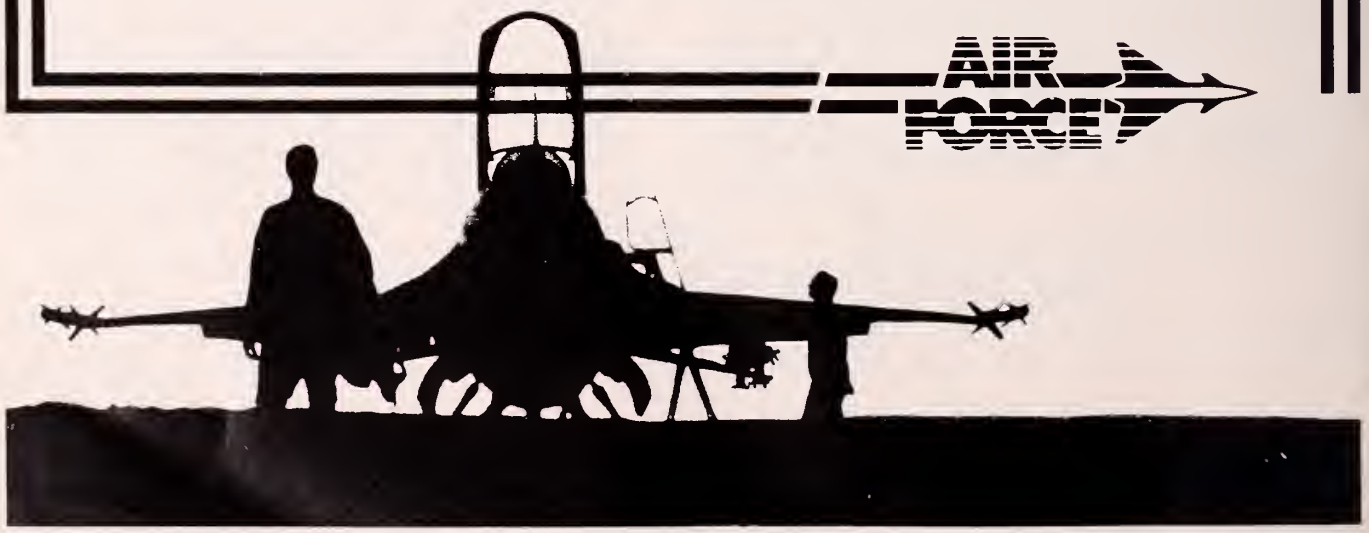

Psychosocial and Environmental Barriers to Medical Care in Later Life

JANE M. THIBAULT, Ph.D.

In *Elderly Patients and Their Doctors*, T. Franklin Williams, M.D. states that:

> Physicians working with older patients—and this includes most physicians—face obstacles of at least three general types in achieving good relationships with these patients and providing the desired care. These three types of obstacles are those found within the physician himself, those found within the patient, and those related to limitations in resources of the environment.[1]

This article deals briefly with the psychological and social problems of the patient and the limitations of the environment.

The diagnosis, treatment and management of the aged patient are perhaps more difficult than the care of any other patient population when age-related variables are considered. The elderly demonstrate a constellation of physical problems; unlike the situation of younger patients, there are significant differences in the way illnesses present in older people, and confusion due to reversible or irreversible causes of brain failure often clouds the diagnostic and prognostic picture.

In *Aging: Its Complex Management*, geriatrician Ronald Cape, M.D., FRCP, writes of the five main problems which constitute the essentials of geriatric medicine. He names the constellation of these five problems the "O Complex" and presents them as being interrelated. Cape states that:

> Falling, confusion, incontinence, homeostatic disturbance, and iatrogenic illness form the geriatric quintet and will be found separately or together in almost every acute or long-term problem posed by the elderly. They constitute an interrelated complex of old age syndromes that are the essence of geriatric medicine. The older the patients, the more common the problems.[2]

James Kurfees, M.D. of the Department of Family Practice at the University of Louisville teaches medical students and residents that to further understand the patient, the physician must add psychosocial and environmental variables to his consideration and comprehension of the patient's problems. These factors can influence greatly the patient's ability and willingness to comply with treatment and can thus make the difference between successful and disastrous management of the older adult patient.

What are these psychosocial and environmental barriers to medical care in later life? This list is long, but the following are a few of the most significant variables:

1. **Attitude toward personal health.** Many older adults believe that their health problems and symptoms are a normal part of the aging process, to be endured rather than treated. Because they believe that nothing can be done about their symptoms, and because they do not know that there may be signs of disease, they avoid consulting a physician. In situations where they are not aware of their own symptoms, such as in dementia, many relatives—some of them not so old—may neglect to bring the person for medical care due to the same beliefs. In addition to erroneous beliefs about physical change and aging, many older people have a sense of hopelessness about their physical problems and as a result they fail to comply with recommended treatment. The physician's interest in the patient can help to change such negative attitudes, as can patient education which presents the normal changes of the aging process.

2. **Lifestyle change.** Losses of many kinds can influence negatively the older patient's concern for his or her physical health. Loss of work and work-related roles, loss of spouse, loss of children through relocation, and loss of a peer confidante are stressful not only because they represent the loss itself, but also because they change significantly patterns of lifestyle and daily rou-

tines.[3] Relocation from one's home to a retirement community or to a nursing home also brings with it a myriad of lifestyle and interpersonal losses—neighbors, pets, cherished household possessions. Most individuals expect some of these changes and adjust adequately if not happily after an appropriate time of grieving. They are helped considerably when they have an opportunity to talk about these losses with someone in whom they can confide. Often the physician fills this role.

3. **Depression.** A significant number of older patients react to their losses with an on-going sense of hopelessness and helplessness and in time sink into a clinical depression. Very often the depression does not present in the usual way, with deep sadness, guilt, and retardation of movement. In the elderly, depression frequently presents as multiple physical complaints, dysphoria rather than despair, increased agitation and anxiety, and cognitive difficulties, particularly the inability to concenturate and slowness of thought. Patients who have a predominance of cognitive difficulties actually are suffering from a depression which is called "pseudodementia." This condition is often misdiagnosed and managed as dementia, rather than as depression. When it is not treated appropriately, the patient can worsen and the cognitive difficulties can become permanent.

Because depression sometimes presents with myriad physical complaints and a sense of dysphoria, the older person consults a physician about his complaints more often than he does a counselor. The physician is usually his primary care practitioner rather than a psychiatrist. Most of the time only physical complaints are expressed, but the older patient usually craves someone in whom he can confide, someone who will take the time to know him intimately. Because of the element of legitimate touch involved in the physician-patient relationship, the interaction with a physician is more satisfying than that with a minister or counselor, who must remain physically detached. The physician should be aware that he satisfies the patient's lifelong need for human contact, keeping in mind that in some cases, older patients have not been touched by another human being for many years. The burden is on the physician to sort out the expressed complaints in an attempt to determine which arise from loneliness and depression and which from disease states.

Elderly patients resist formal psychiatric treatment. They are often noncompliant with a referral to a psychiatrist, as they interpret this both as a social stigma and as abandonment by their primary physician. The primary physician should consider treating the depressed patient himself, with the consultation of a psychiatrist if needed. The depressed patient often does well with an interested physician, antidepressant therapy, and social work intervention to deal with the social and environmental problems.

4. **Low levels of physical, social, and environmental stimulation.** After retirement, some older adults believe they have earned the right or are expected to rest physically, mentally and socially. As a result, the element of cognitive and physical stimulation that was inherent in the daily working environment is lost. There is a tendency to eschew physical exercise. Social contacts of the workplace are lost and opportunities to develop new relationships are not as numerous as they are for younger persons. Little attention is paid to cognitive stimulation as hours are spent watching television. Day after day is spent within the same four walls, with an occasional trip to the grocery store or to the bank. The result of this situation is lethargy, a dullness of body, mind, and spirit which is actually a result of sensory deprivation. This situation can also lead to sleep disturbances, dysphoria, and paranoia-like states. Patients should be made aware that a low intensity of sensory stimulation can lead to significant loss of mental and physical functioning and should be encouraged to engage in senior center and church activities, volunteer projects and civic involvements, educational endeavors, and physical exercise. They must be helped to realize that the quality of their lives in retirement is dependent on a significant amount of personal discipline.

5. **Lack of sufficient financial resources and lack of transportation.** Both of these factors have direct impact on compliance. However, these factors are somewhat out of the control of the elderly themselves. The physician should be aware of the financial constraints of his or her patients. He should also be aware of the difficulties patients must endure attempting to get to the office. Once the physician is aware of difficulties in these areas, he would do well to access the help of a social worker from a senior citizens center. These professionals are aware of all of the local, state and federal benefits to older adults. They offer help in filling out insurance forms. Many are skilled counselors and will make a home visit upon request for a more in-depth assessment of social and environmental variables

affecting the management of patients. They usually perform these activities at no cost to the patient.

In summary, the care of the older adult is complex and it is affected by variables outside the physiological domain. The physician should learn what other factors are affecting the patient's health and his or her ability to comply with a therapeutic regimen. If necessary he or she should not hesitate to involve a social worker to care for the psychosocial and environmental barriers to medical care.

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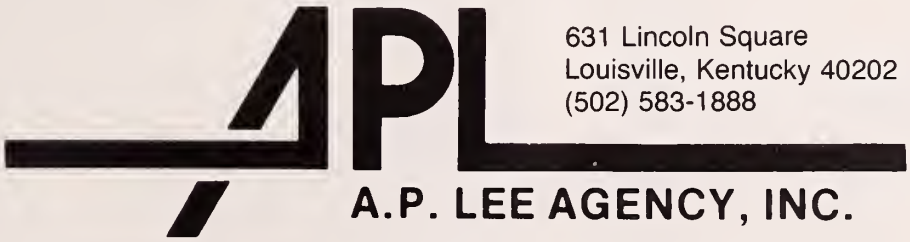

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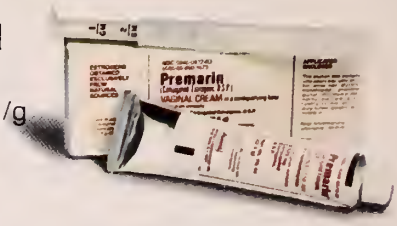

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)*

PREMARIN® Brand of conjugated estrogens tablets, USP
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1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA.

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.

2. ESTROGENS SHOULD NOT BE USED DURING PREGNANCY.

The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) **Osteoporosis (abnormally low bone mass).** Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important, product labeling should be reviewed to minimize possible adverse effects.

CONTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (See Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nontatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

a. Increased sulfobromophthalein retention.
b. Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased norepinephrine-induced platelet aggregability.
c. Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered.
d. Impaired glucose tolerance.
e. Decreased pregnanediol excretion.
f. Reduced response to metyrapone test.
g. Reduced serum folate concentration.
h. Increased serum triglyceride and phospholipid concentration. As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow; dysmenorrhea; premenstrual-like syndrome; amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued; erythema multiforme; erythema nodosum; hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido.

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females.

DOSAGE AND ADMINISTRATION:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. *Given cyclically for short-term use only.* For treatment of moderate to severe *vasomotor* symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. *Given cyclically:* Female castration. Osteoporosis. Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis—0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals.

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

References:

1. Whitehead MI, Townsend PT, Pryse-Davies J, et al: Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium. *N Engl J Med* 1981;305:1599-1605. 2. Paterson MEL, Wade-Evans T, Sturdee DW, et al: Endometrial disease after treatment with oestrogens and progestogens in the climacteric. *Br Med J* 1980;280:822-824. 3. Magos AL, Brincat M, Studd JWW, et al: Amenorrhea and endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women. *Obstet Gynecol* 1985;67:496-499. 4. Whitehead MI, Lane G, Siddle N, et al: Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women. *Semin Reprod Endocrinol* 1983;1:1;41-52. 5. Barnes RB, Roy S, Lobo RA: Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women. *Obstet Gynecol* 1985;66:216-219.

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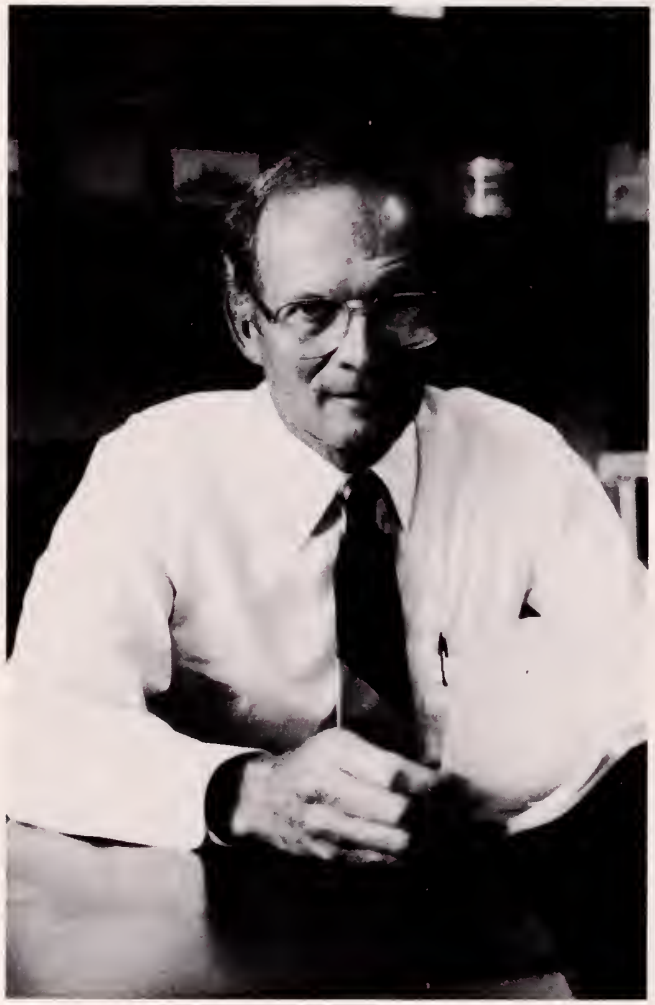
KMA President



The key element in any organization is participation by its members. Richard F. Hench, M.D., is a serious participant in organized medicine and his most important role has just begun as KMA President.

His past involvement in KMA has been impressive. A Lexington internist, Doctor Hench has served as KMA Alternate Trustee and Trustee for the 10th District; Chairman of the KMA Board of Trustees for two terms and KMA Vice President. He currently serves as the only physician on a legislative task force appointed by the Speaker of the House of the Kentucky General Assembly to deal with the liability insurance problem and is a member of KMA's ad hoc committee on Professional Liability Insurance.

The legislative task force is composed of 22 members from all areas of Kentucky explains Doctor Hench. "Attorneys, insurance representatives, Chamber of Commerce members and labor representatives are all involved to attack the liability problem from the standpoint of society as a whole, not just medicine. The Speaker will study our recommendations which should carry a lot of weight in the legislature; so whatever this task force recommends will be extremely important."

The KMA ad hoc committee on Professional Liability Insurance has been dealing solely with the medical liability problem for two years. They are basing their recommendations on directives established by the KMA House of Delegates in 1985. These directives center on reducing the statute of limitations, permitting periodic payments, collateral sources and amending the constitution to permit limitations on non-economic loss. (A detailed 15 page plan was submitted to the KMA House of Delegates dealing with education of the public, the legislators and physicians. Results of the actions taken by the House of Delegates will be published in the December *Journal of KMA*.)

Richard F. Hench, M.D.

Liability insurance is one of the most difficult problems facing medicine Doctor Hench believes. "Until a few years ago professional liability was basically a doctor problem, and the public-at-large was not very concerned. Although there was some concern about availability of liability insurance and its effect upon medical care, public awareness came only when other parts of our economy such as small businesses, day-care centers, architects and engineers began to see their rates increase dramatically. We still need to educate the public on the repercussions the crisis is having on medical care. It is affecting the physician/patient relationship as a result of the practice of defensive medicine and the additional cost of care. It is extremely detrimental to our attempts to perform peer review and to deal with the incompetent or unethical doctor. The physicians involved in this process are vulnerable to lawsuits."

Care for the indigent is the second crisis facing medicine today says Doctor Hench. "Most physicians have always seen a number of indigent patients, but until the Physicians' Care Hotline was established we had no accurate record of how extensive this care was. A great amount of credit should go to the KMA, to Doctor Russell Travis, Chairman of the Physicians Care Operating Committee, and to the 2250 Kentucky physicians who participate in a program geared directly toward caring for the indigent."

The third problem facing the future of medicine, says Doctor Hench, and perhaps the most insidious, is that of physician apathy. "The attitude and morale of physicians will be tested in the next few years. Too many established physicians feel that they are in a losing battle, that nothing can be done, and the best thing to do is to bide their time until they can retire. This at-

titude is very prevalent and very destructive. Medicine is still a great and noble profession. If we are to maintain the high quality of care and preserve the high ethical standards then we must all work together."

Doctor Hench credits his partners' cooperation in allowing him to spend time as a KMA officer. "John Perrine, Adrian Fulmer, and John Borders have been a tremendous help. They switch days, change call and cover for me. I think it is much more difficult for a solo practitioner to do this. Maybe more physicians going into group practice will mean more participation in organized medicine in the future."

Doctor Hench has probably had more than his share of experience in learning how to manage his time from living with seven children that he and his wife, Barbara, share. "I met Barbara at a Fayette County Medical Society meeting when she was executive director. That's the best committee meeting I ever attended. She had two children and I had five. At one time we had six teenagers living in the house. We learned something about survival at that time."

Doctor Hench has been practicing in Lexington for 22 years. He is a native of Pennsylvania and graduated from the Temple University School of Medicine in 1956. While Doctor Hench was in the Air Force he met Doctor John E. Myers, Jr., of Lexington. After visiting Doctor Myers he was so impressed with Lexington that he decided to stay.

Doctor Hench continues to explain his motivation to participate. "Everybody owes their profession a certain amount of time and the effort to maintain and improve it. The role of the general membership is increasingly important. We should pay close attention to whom we elect to positions of leadership. Doctors tend to be very individualistic—accustomed to making decisions and acting on their own. If we want to continue to function as the greatest profession in the world we cannot survive without a strong federation including local, state and national medical organizations."

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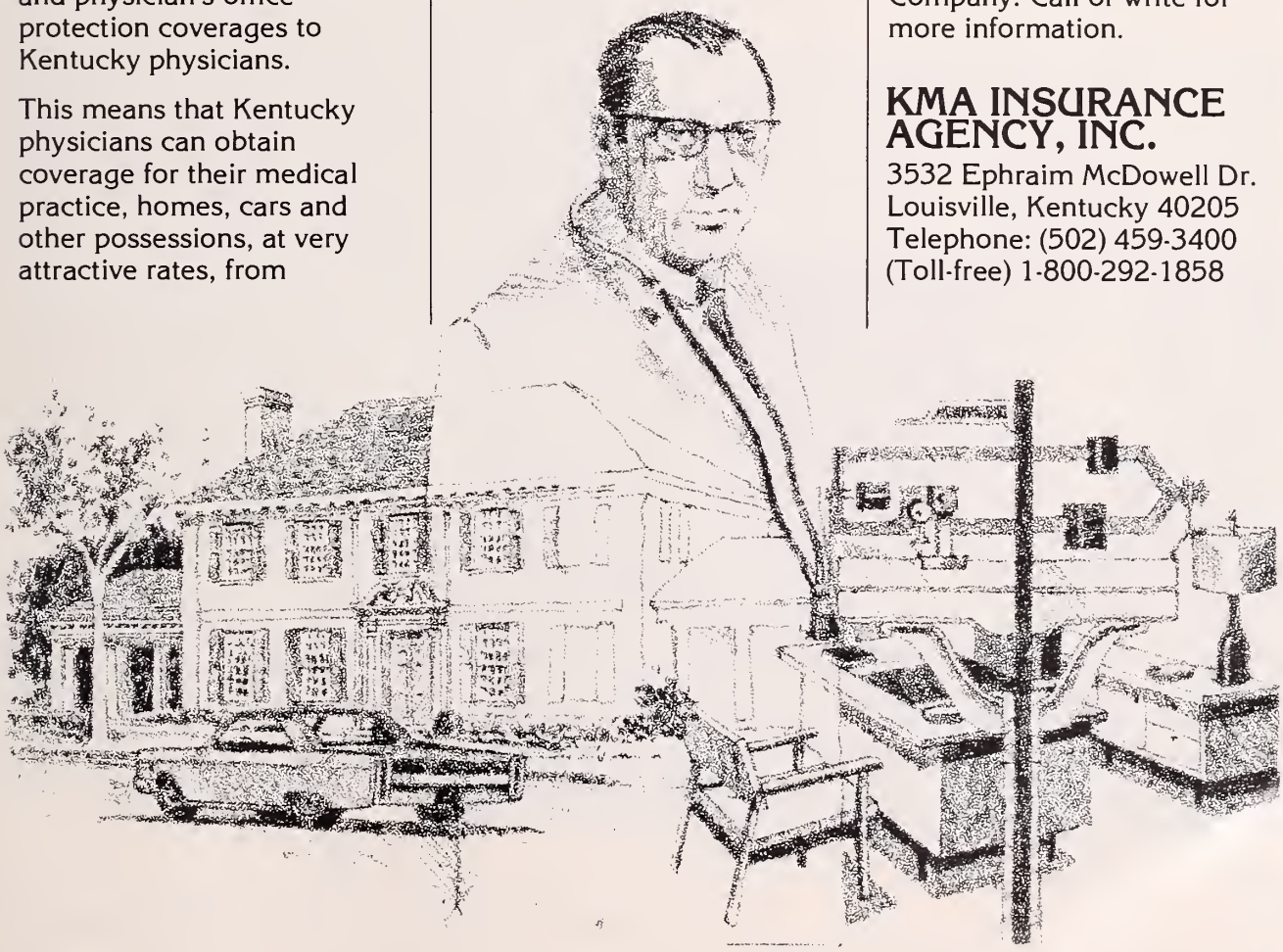

Highlights of KMA Board of Trustees

The KMA Board of Trustees met August 6 and 7, 1986, to discuss a lengthy agenda including reports and recommendations to the KMA House of Delegates which met in September. (A complete report of the KMA House of Delegates proceedings will be in the December *Journal of KMA.*)

In the KMA Headquarters office report, S. Randolph Scheen, M.D., Secretary-Treasurer, stated that on June 30. KMA had 3,341 full dues-paying members and by August the number had increased by 162 members to 3,503. This growth was attributed to the hard work by the KMA Membership committee and the successful efforts of KMA Alternate Trustees and county society staffs.

Henry R. Bell, M.D., a member of the Committee on Community and Rural Health said the Committee was recommending that the Board work with the Cabinet for Human Resources in resolving the problem of maternity care in rural areas. The Committee is concerned with the high incidence of mothers, especially teenagers, delivering extremely low birth-weight babies at primary care hospitals rather than tertiary care centers.

Danny M. Clark, M.D., Chairman of the Committee on Maternal and Child Health, stated that his committee had also discussed these matters, and that both Committees had met with Patricia Nicol, M.D., Director, Division of Maternal and Child Health of the Department of Health Services. Doctor Nicol expressed a willingness to work with KMA to improve access of indigent patients to OB-GYNs and to tertiary care centers.

In other actions, the Board appointed Martha Keeney Heyburn, M.D., Louisville, as an Associate Editor to fill the unexpired term of S. Randolph Schrodt, M.D., Louisville. Doctor Schrodt had served as Associate Editor since 1974.

Susannah Sard, Development Administrator of Kentucky Educational Television, (KET) thanked the Board members for their support of KET during the previous year. She reported that KMA members had contributed more than $35,000 to KET and an additional 17 physicians contributed $10,000 through individual fund memberships in KET.

The next meeting of the KMA Board of Trustees is scheduled for December 17 and 18, 1986.

KMA Board of Trustees

Charles C. Smith, Jr., M.D., (1) KMA Past President, accepts bound Journals of KMA from President Wally O. Montgomery, M.D.

Nelson B. Rue, M.D., Bowling Green, Chairman of the Board.

A. Evan Overstreet, M.D., (1) Editor of the Journal, accepts his bound edition from KMA President Wally O. Montgomery, M.D.

S. Randolph Scheen, Louisville, Secretary-Treasurer.

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Bowling Green Hosts Sixth District Trustee Meeting

During the Sixth District Trustee meeting with the Bowling Green/Warren County Medical Society, KMA President Wally O. Montgomery, M.D., discussed concerns addressed in the past session of the Kentucky General Assembly and KMA's Professional Liability Program.

Francis J. Halcomb, M.D., Scottsville (center of photo) is the Democratic candidate for the House of Representatives, 22nd District.

Nicholas Z. Kafoglis, M.D., (1) Bowling Green, Democratic candidate for Senate in District 32, talks with KMA President Wally O. Montgomery, M.D.

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All advertisements must be approved by the Board of Editors. Deadline is the first of the month two months preceding the month of publication. Charges for advertising are: 20¢ per word. Average word count: 7 words per line. $5.00 minimum. Send payment with order to: The Journal of KMA, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

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19–20 Advanced in Gastrointestinal Surgery, Hyatt Regency Hotel, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, University of Kentucky, Lexington, KY 40536-0086, (606) 233-5161.

1987
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22–27 Eighteenth Family Medicine Review, Hyatt Regency Hotel, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Offfice Building, University of Kentucky, Lexington, KY 40536-0086, (606) 233-5161.

February – April 1987 Home Study Course A, Johns Hopkins University School of Medicine 28th Annual Postgraduate Institute for Pathologists in Clinical Cytopathology. Home Study Course A is provided each registrant for personal reading and microscopic study at their own laboratory in preparation for Course B.

April 27 to May 8, 1987 In-Residence Course B lecture series, laboratory studies and clinical experience, Johns Hopkins Medical Institutions, Baltimore, Maryland. Contact: John K. Frost, M.D., 604 Pathology Building, The Johns Hopkins Hospital, Baltimore, MD 21205, (301) 955-3522.

MARCH

9–13 "Hawaii 87: Critical Issues in Primary Care, Waiohai Hotel, Poipu Beach, Kauai, Hawaii. Contact: Valerie Murray, The Pacific Institute of Continuing Medical Association, P.O. Box 1059, Koloa, Kauai, Hawaii 96756, (808) 742-7471.

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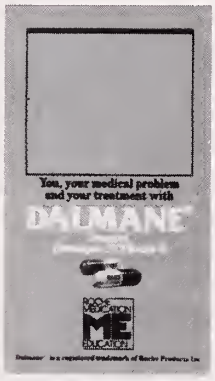

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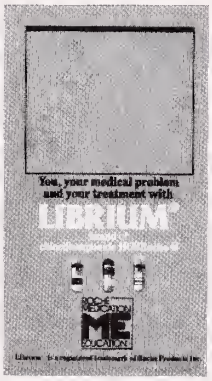

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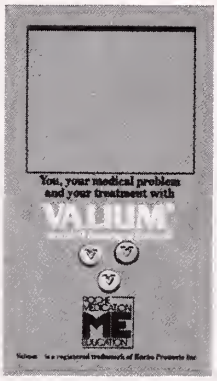

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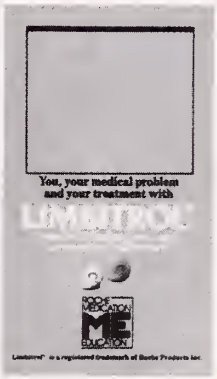

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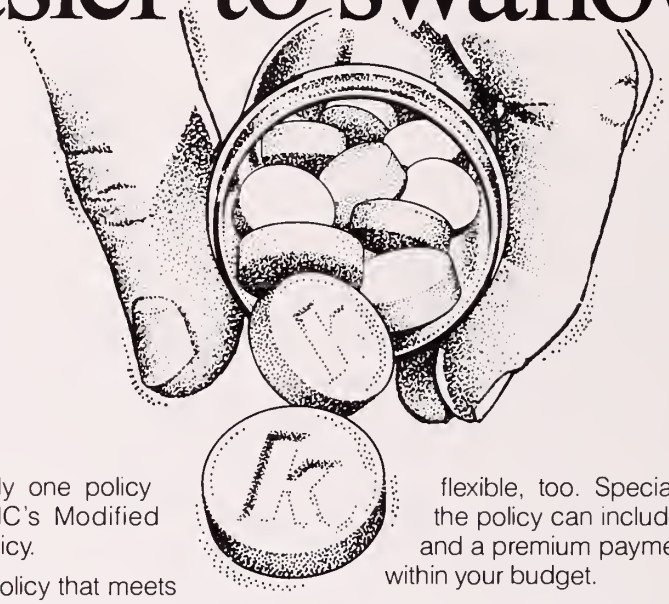

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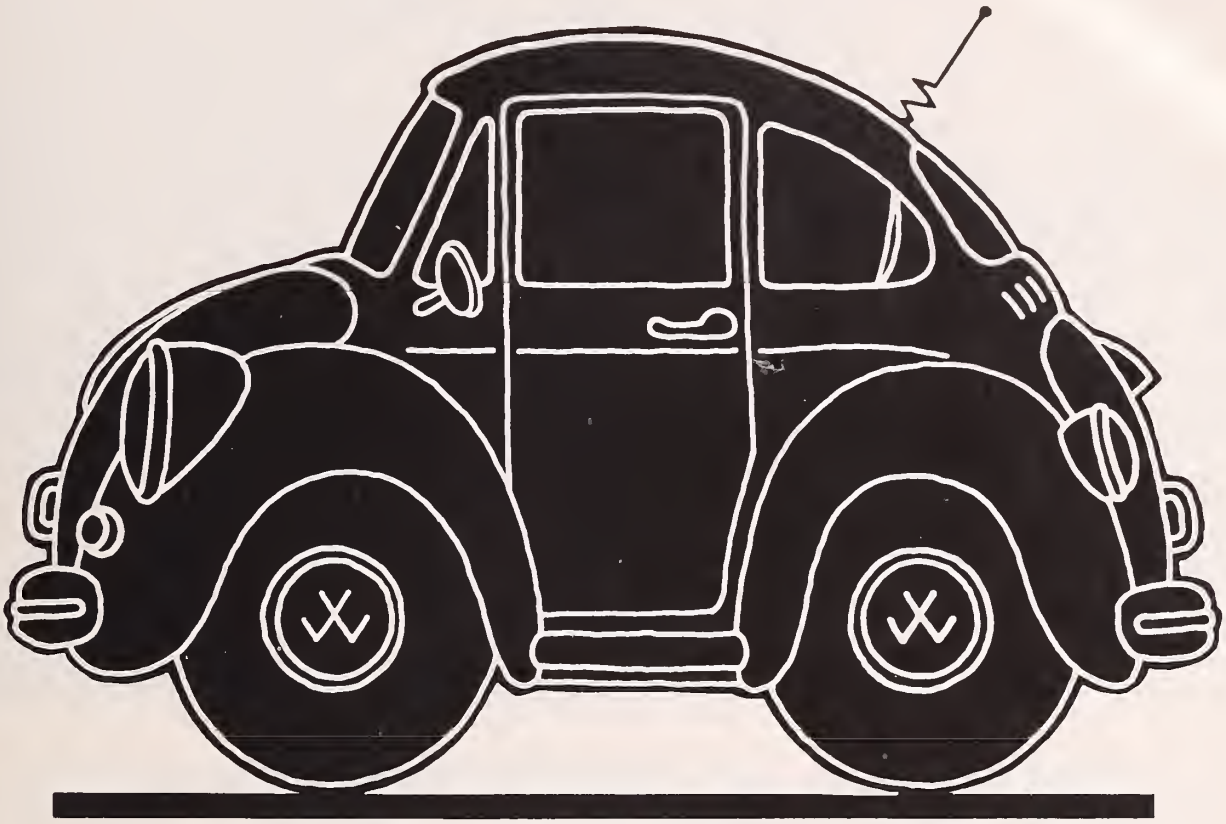

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PRESIDENT'S PAGE

During the last few months I have had rather intensive exposure to the professional liability problem. As a member of the Legislative Task Force on Liability Insurance, I have heard detailed presentations from trial lawyers, consumer representatives and national authorities on the insurance industry, re-insurance and tort reform. The Task Force has had a detailed review of the Kentucky Insurance Commission and how it works.

This exposure has reinforced my belief that the liability problem is multi-faceted and any relief must, of necessity, be obtained by a multi-faceted approach.

Resolution F, adopted by the KMA House of Delegates this year, is an excellent program through which we hope to educate the public and our legislators on the liability problem.

In all honesty, I believe that anyone who has studied and watched the tort reform process across the country will agree that this will be a long, hard fight with much uncertainty and many questions regarding the outcome and effects on the liability crisis. Likewise, the education of the public and the legislators will be difficult and expensive. In view of this, I believe it is very important that we utilize all possible avenues of relief.

Many people who are very knowledgeable about the liability problem believe that one of the quickest and most effective ways to ease our liability pain is through risk management programs for physicians. Last month the American Academy of Family Physicians launched an all out effort to address the professional liability problem. Their first recommendation was a "comprehensive risk management program for members."

Doctor James S. Todd, AMA Senior Deputy Executive Vice President, recently stated that, "Those deeply involved in the malpractice problem are convinced that sincere risk prevention, by itself, can produce more meaningful results with less aggravation for the physician than any other activity, and at the same time will contribute more to quality of patient care and patient satisfaction."

We need to explore all possible avenues of relief including tort reform, public education, political and coalition activities, and risk management. I believe it would be a grave mistake to put all our eggs in the tort reform basket.

Richard F. Hench, M.D.
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Respiratory Failure Secondary to Eaton-Lambert Syndrome

Lynell C. Collins, M.D.

This is the first report in the English Literature of respiratory failure developing in a patient with Eaton-Lambert Syndrome due to small cell carcinoma of the lung. The patient improved with chemotherapy and irradiation of his tumor, but showed no clinical response to treatment with guanidine hydrochloride.

The Eaton-Lambert, or Myasthenic Syndrome is a peripheral neuropathy typically presenting with fatigue, proximal muscle weakness and decreased deep tendon reflexes with paradoxical increase in strength in muscular contraction with repetitive stimulation. This syndrome is most commonly associated with intrathoracic tumors[1] especially small cell carcinoma of the lung and autoimmune disorders.[2] It is characterized by typical electromyogram (EMG) findings of small initial evoked muscle response with progressive facilitation on tetanic stimulation.[3] Presented is a rare manifestation of the Eaton-Lambert Syndrome due to small cell carcinoma of the lung: hypoventilation with respiratory failure.

Case Report

A 64-year-old male presented for evaluation of a mass in his neck associated with generalized weakness, malaise, lethargy and intermittent hoarseness of one month's duration. Examination revealed a nodular, firm, fixed, nontender mass in the right supraclavicular fossa without overlying skin change and diminished deep tendon reflexes with normal motor and sensory exams. A chest x-ray revealed an 11.5cm. anterior mediastinal mass with bilateral pleural effusions. Arterial blood gases obtained while the patient inspired room air revealed a pH 7.47, pO_2 70mmHg and pCO_2 39mmHg. An automated chemistry profile of serum revealed mild hyponatremia (sodium 132meq/dl), elevated lactate dehydrogenase (506 U/L), and normal alkaline phosphatase, and transaminases. A urinalysis revealed 100mg/dl of protein; complete blood count and coagulation profile were normal. A thoracentesis was nondiagnostic, but was complicated by a progressive pneumothorax requiring chest tube re-expansion. There was no evidence of pneumothorax at chest tube removal although arterial blood gases now revealed hypercapnia with a pH 7.38, pO_2 75mmHg and pCO_2 58mmHg. Twelve hours later the patient was found unresponsive with an arterial blood gas on 3 liters inspired oxygen of pH 7.218, pCO_2 91mmHg and pO_2 75mmHg. Although clinically there was no evidence of pneumothorax a chest tube was replaced after oral intubation of the trachea was performed. At intubation the vocal cords were noted to be abducted without evidence of obstruction. Although the patient ventilated easily with mechanical assistance, spontaneous tidal volumes were only 50-100cc. A bronchoscopy revealed no airway compression, but was nondiagnostic. A needle biopsy of the supraclavicular mass was nondiagnostic. The patient was alert and responsive but was unable to sit or stand unassisted and developed nasal regurgitation with deglutition. Electrolytes, calcium, phosphate, and magnesium levels were normal, as was a thyroid profile and cortisol levels. Plethoric fascies were noted and computed axial tomography of the chest with intravenous contrast identified an anterior mediastinal mass compressing the superior vena cava, but with no compromise of the airway. Although tissue diagnosis remained unknown, mediastinal irradiation was initiated for the superior vena cava syndrome. At the time of tracheostomy placement, a large wedge biopsy of the supraclavicular mass was obtained and small cell carcinoma was demonstrated. An EMG was diagnostic for Eaton-Lambert Syndrome. Guanidine hydrochloride was begun and rapidly advanced to maximal dose without subjective or objective improvement in clinical status. Spontaneous tidal volumes remained in the 50-100cc range, precluding weaning from the mechanical ventilator. However, with initiation of chemotherapy with cyclophosphomide, doxirubicin and vincristine and

completion of mediastinal irradiation, the patient was weaned from the ventilator with tidal volumes of 500-700cc. and normalization of arterial blood gases. He had become able to ambulate with assistance when he died suddenly.

Discussion

The Eaton-Lambert Syndrome is seen occasionally in patients with lung cancer and may occur in as many as 6% of patients with small cell carcinoma of the lung.[4] There is, however, only one other case of respiratory failure possibly secondary to this syndrome reported in the world literature.[5] That patient also had an associated polymyositis paraneoplastic syndrome and may have, therefore, had other factors contributing to his hypoventilation. There are additional reports of dyspnea associated with Eaton-Lambert Syndrome,[2,4] but none requiring prolonged mechanical ventilation solely for weakness of the respiratory muscles. This patient followed a course typical for Eaton-Lambert Syndrome with small cell carcinoma of the lung including his presenting complaints,[1] lack of response to guanidine hydrochloride, but marked improvement with chemotherapy,[4] then sudden death.[2]

The pathophysiology of Eaton-Lambert Syndrome, unlike myasthenia gravis, appears to be a pre-synaptic abnormality of acetylcholine release. There is a decrease in quantal release in response to the nerve impulse, resulting in an end plate potential 10% of normal.[6] The precise nature of the presynaptic blocking agent may vary depending on the underlying disease (autoimmune vs. malignancy). There is evidence the Eaton-Lambert Syndrome can be passively transferred in the immunoglobulin fraction of serum from patients with an underlying tumor or autoimmune disease,[7] as well as by an extract from a tumor homogenate.[8] While individuals with Eaton-Lambert Syndrome associated with autoimmune disease respond dramatically to immunosuppression and plasmapheresis,[7] patients with malignancy respond best to therapy directed toward the tumor.[4] It has been postulated that patients with tumor-associated Eaton-Lambert Syndrome may produce a peptide from the tumor which reacts with the presynaptic vesicle, interfering with release of acetylcholine.[8] The passive transfer by immunoglobulin fractions from the patients also raises the possibility of an antibody to tumor antigen cross-reacting with presynaptic vesicles.[7]

Treatment of this syndrome with guanidine hydrochloride, an agent which releases more acetylcholine with each nerve impulse,[9] has been standard therapy for years.[1,2,4] The effect of guanidine hydrochloride is not enhanced by acetylcholinesterase inhibition, another differentiating point from myasthenia gravis.[9] The beneficial effects of guanidine hydrochloride are seen primarily in those patients with autoimmune-associated Eaton-Lambert Syndrome.[2,4] The paraneoplastic syndrome may or may not recur with tumor recrudescence, but may be the first sign of tumor relapse.[3]

This case is presented because the patient had prolonged respiratory failure from hypoventilation due to Eaton-Lambert Syndrome. This report should serve to alert physicians to a potentially life-threatening, but reversible cause of dyspnea in cancer patients.

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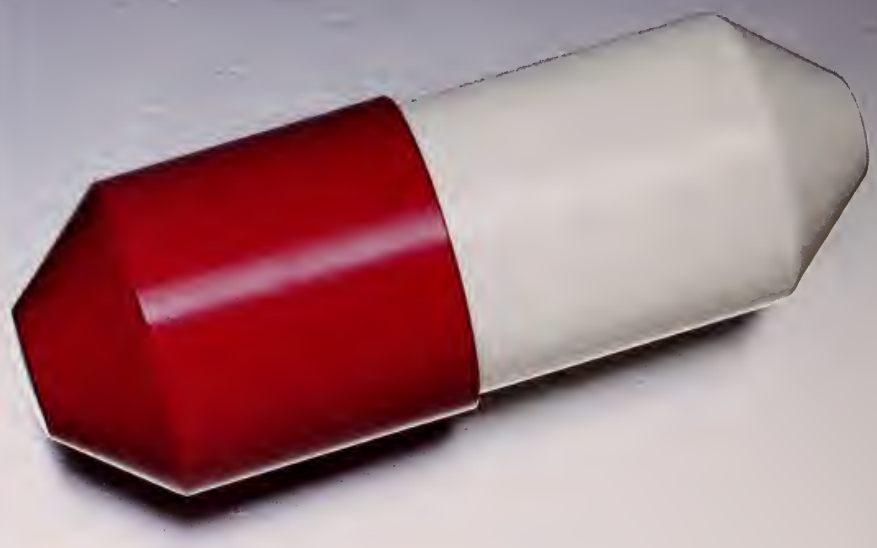

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Roger W. Pease, Jr., Ph.D., Editor

Merriam-Webster Inc.

This is a completely new type of medical dictionary! Previously these books have consisted of medical terminology with their appropriate explanations. Now with this publication some of the advantages of the new type of references are employed. These include using a single alphabetical listing for all entries, allowing one to identify a word where expected. Parts of speech are appropriately labeled for all entires. Proper points for hyphenation at the end of the line are marked. A very helpful benefit is the addition of illustrative examples of the word used in context.

About 1,000 biographies of famous medical people are included, because these names have become part of the medical lexicon.

There is a very useful early section of explanatory notes which are very helpful in using the dictionary. Abbreviations, prefixes, suffixes and combining forms are also included. Even pronunciation symbols are considered. Many of the signs and symbols used in medicine are presented. In view of the many foreigners who would use the dictionary, a very helpful handbook of style will be welcomed.

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Stephen Z. Smith, M.D.

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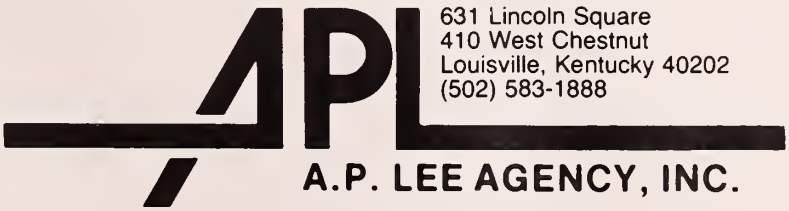

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Deceased Kentucky Physicians 1986

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John W. Brogan, Erlanger

Robert W. Bushart, Fulton

Harry Caldwell, Danville

Carl B. Caplinger, Hopkinsville

James A. Clarke, Madisonville

Julian B. Cole, Henderson

Lyndon F. Combs, Hazard

Henry F. DeLong, Louisville

George G. Greene, Lexington

Herbert P. Hargett, Jeff., IN

Raymond Heitz, Louisville

Arthur A. Hellebusch, Lexington

Henry C. Herrmann, Louisville

Hugh L. Houston, Murray

Robert R. Kidd, Louisville

Aaron T. Marcum, Lexington

Francis M. Massie, Versailles

George M. McClure, Danville

William S. Morgan, Jr., Paris

Richard P. O'Neill, Lexington

Sam A. Overstreet, Louisville

Frank Picklesimer, Paintsville

Willett H. Rush, Frankfort

John Hancock Siehl, Ludlow

Warren E. Sloan, Paducah

Richard R. Slucher, Louisville

Harmon T. Smiser, Cynthiana

Grace Snyder, Frankfort

George C. Stege, Louisville

Thomas B. Stone, Mayfield

James D. Walker, Louisville

William L. Woolfolk, Owensboro

Charles R. Yancey, Hopkinsville

Thomas D. Yocum, Lexington

List of names of deceased physicians available to the Journal as of August 1, 1986.

Lives of great men all remind us
We can make our lives sublime
And, departing, leave behind us
Footprints on the sands of time.

Henry Wadsworth Longfellow

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Unless the Lord watches over the city. The watcheman stays awake in vain. It is in vain that you rise up early to go late to rest, eating the bread of anxious Toil; for he gives to his beloved in sleep.

PSALM 127:1–2

And he said, the Kingdom of God is as if a man should scatter seed upon the ground, and should sleep and rise night and day, and the seed should sprout and grow he knows not how. The earth produces of itself, first the blade, then the ear, then the full grain in the ear. But when the grain is ripe, at once he puts in the sickle, because the harvest has come.

MARK 4:26–29

If I am so good why am I scared?

The phone rings on a beautiful Saturday afternoon shattering the moment of rest. The emergency room physician is terse as he describes the patient: "acutely short of breath, diaphoretic, but no chest pain. He looks to be in pulmonary edema."

While listening to the description a fine sweat develops on my chest and my heart speeds up perceptibly. I sound calm as I tell him I am on my way and order the necessary routine. But I am not calm at all. I am vaguely, but definitely fearful, anxious and uncertain of myself. Why no chest pain, silent infarct? Can I handle this? What if I miss something?

This orgasm of introspection is usually over by the time I've reached the hospital, but it is more often than not a rite of passage from initial call to first contact with the patient. Why this self doubt after 20 years of practice? Is this unique with me or do we all have a certain degree of insecurity in the acute crisis situation?

I suspect that a modicum of fear is healthy, but the matter of degree is crucial. Too much fear, and paralysis of decision supervenes. Anxiety—fear is debilitating and a minimum of discomfort is about all a physician can tolerate and still function adequately. And fear must be conquered and anxiety relieved as best we can.

I would be less than honest if I did not give credit to the source of this relief for me. After some period of anxiety I realize that power over and control of the day's events are not in my hands at all, but in those of a power who knows when a sparrow falls and even numbers the hairs of our head.

My obligation is to do my best (not always easy, but always possible) for the patient. The ultimate outcome will be decided by a wiser, more benevolent nature than mine.

Paul C. Grider, Jr., M.D.

Impotency. Help your patients and help yourself as you learn

the latest methods for its diagnosis and treatment while you earn continuing medical education credit.

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Current Management of Male Sexual Dysfunction

When? January 17, 1987.

Where?

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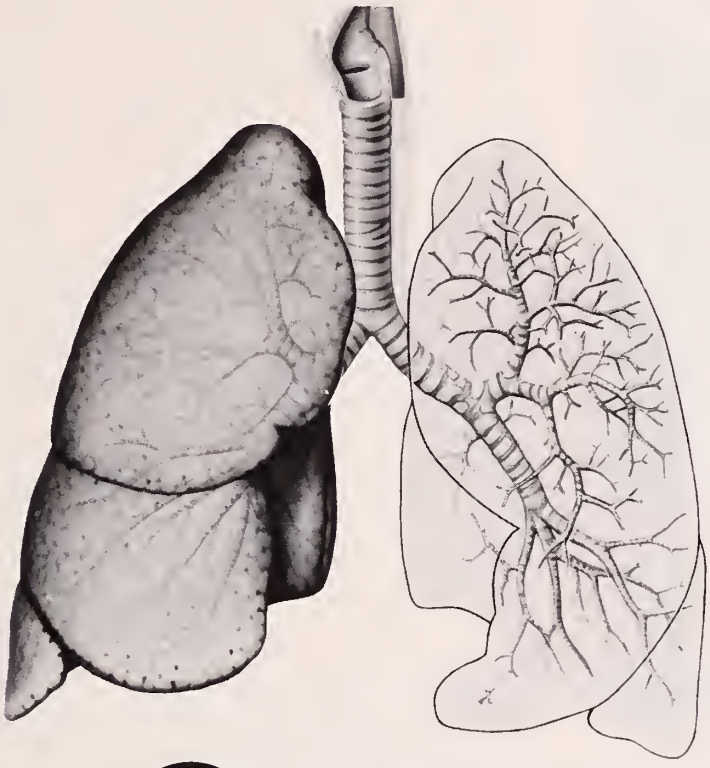

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offers effectiveness against the major causes of bacterial bronchitis

H. influenzae, H. influenzae, S. pneumoniae, S. pyogenes
(ampicillin-susceptible) (ampicillin-resistant)

Brief Summary Consult the package literature for prescribing information

Indications and Usage Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings IN PENICILLIN SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics Such colitis may range in severity from mild to life-threatening

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C difficile* Other causes of colitis should be ruled out

Precautions: *General Precautions* — If an allergic reaction to Ceclor* (cefaclor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e g , pressor amines, antihistamines, or corticosteroids

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms Careful observation of the patient is essential If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape* (Glucose Enzymatic Test Strip, USP, Lilly)

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis

Usage in Pregnancy — Pregnancy Category B — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor* (cefaclor, Lilly) There are, however, no adequate and well-controlled studies in pregnant women Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed

Nursing Mothers — Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses Average levels were 0 18, 0 20, 0 21, and 0 16 mcg/ml at two, three, four, and five hours respectively Trace amounts were detected at one hour The effect on nursing infants is not known Caution should be exercised when Ceclor is administered to a nursing woman

Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below

Gastrointestinal symptoms occur in about 2 5 percent of patients and include diarrhea (1 in 70)

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment Nausea and vomiting have been reported rarely

Hypersensitivity reactions have been reported in about 1 5 percent of patients and include morbiliform eruptions (1 in 100) Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor Such reactions have been reported more frequently in children than in adults Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy No serious sequelae have been reported Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients)

Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic — Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40)

Hematopoietic — Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200)

(D617B2R)

Note Ceclor* (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information

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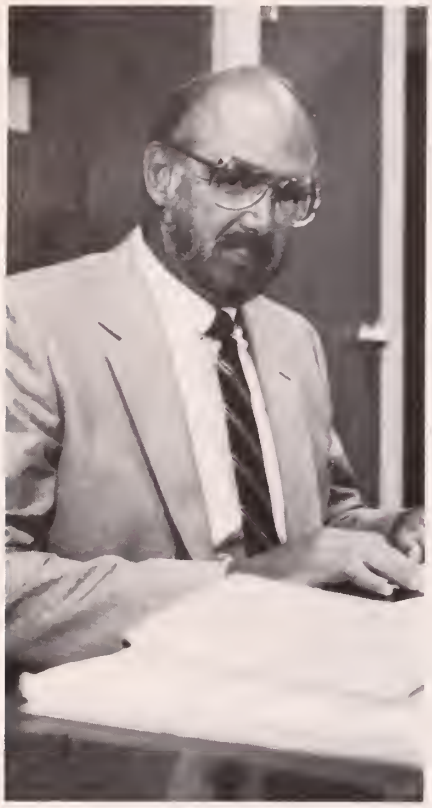


Russell L. Travis, M.D.

Chairman
Physicians Care Operating Committee

Two years ago Kentucky Physicians Care became the first statewide program providing voluntary medical care to indigent patients and is still the only formalized statewide indigent care structure of its kind in the country. One of its leading proponents is Russell L. Travis, M.D., a Lexington Neurosurgeon. As Chairman of the Physicians Care Operating Committee, Doctor Travis has spent countless hours traveling and promoting the program and recruiting physicians to become involved. More than 24,000 calls have been made to the toll free number, with 2,252 Kentucky physicians participating in the program. The program has been credited with helping to avert a legislative proposal calling for a 1% tax on Kentucky physicians incomes to help fund indigent care.

KMA: *What first brought the indigent care problem to your attention?*
Travis: An incident at the University of Kentucky (UK) garnered a great deal of publicity in Lexington. The newspaper reported that a pregnant woman was allegedly turned away from the University Hospital because she had no insurance. She then delivered the baby in the parking lot. As a result, UK appointed a Health Care Access Committee to identify issues and focus on solutions to the medically indigent care crisis in Central and Eastern Kentucky. These recommendations were published and generated quite a discussion during the December 1983 KMA Board meeting. The KMA subsequently appointed an ad hoc committee to study these recommendations and I was one of the six members.

KMA: *What has been your motivation to remain active? It has obviously involved a lot of work and time.*
Travis: Probably loyalty to KMA more than anything. I felt at its inception that there was either a potential for KMA to receive a terrible black eye or to obtain a positive image. Realistically, the main concern we had was that something had to be done with the problem of indigent care.

KMA: *What kind of feedback have you gotten on this program from other physicians and KMA membership?*
Travis: It's been a mixed response. Some physicians, particularly primary care, have joined and have seen more than 100 patients a month; others have seen very few. It has been an emotional issue. Some physicians have refused to join but continue to treat indigent patients. They just don't

wish to formally participate through this program. Many physicians still believe in the traditional concept that "we are the good guys." They cannot perceive that members of the public might think that physicians are greedy. That's one of the problems—fighting this concept. This negative image of physicians has been reinforced by government. Government promised to finance Medicare and Medicaid and now realizes that it is too costly. As a result, the public believes that physicians make too much money and are draining the program.

KMA: *What are some solutions to suggest to the Legislature?*
Travis: The solution must involve all segments of society. You don't tax grocery stores to pay for food stamps. You don't tax builders to pay for housing projects. You can't tax physicians to pay for indigent care. There are a tremendous number of businesses in the state that don't provide and are not required to provide health insurance. Employees are not required to carry health insurance. They simply gamble that they or members of their family won't get sick. When they do get sick, Kentucky physicians must provide free care. Another segment or gap in coverage that needs to be seriously studied is catastrophic insurance. There are a number of people who have health insurance that is worthless. Indigent care is such a complex problem which is why the Legislature has such a difficult time coming to grips with it. Their solution has always been to tax providers. This is an unacceptable solution.

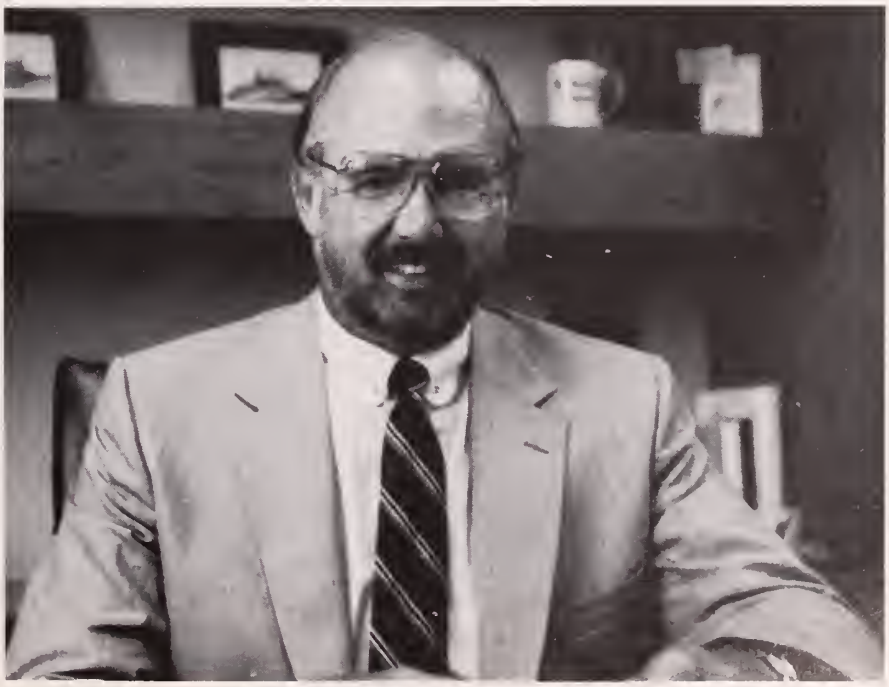
KMA: *What is the future of the Physicians Care program?*
Travis: I don't see how we can stop right now, but KPC is definitely not a permanent answer to the indigent care problem. The 1988 Legislature must deal with financing indigent care and until then I don't think KPC can be abandoned. There are two major problems affecting physicians today, Professional Liability insurance and indigent care. Some people believe that the indigent care problem has the potential to totally revamp the way we presently practice medicine. Under the Nixon administration, the Assistant Secretary of Health and Human Services said that when the indigent in this country reach 40 million there would be another major congressional drive toward national health insurance. We have about 35 million on the rolls now. I don't think national health insurance will pass, but we could see something even worse. This is one of my major motivations for getting involved in this program. Better that we put up with a lot of static now and to know that KPC provides us a seat at the table. It has given us credibility. We can go to the Legislature and say, "Wait, you can't solve this problem without us."

KMA: *Why did you decide to practice in Lexington?*
Travis: I'm from Kentucky. I was born in Jenkins and later moved to Glasgow. After finishing medical school at the University of Louisville, I did a neurosurgery residency in Charleston, South Carolina. I like the area and the ocean, and that is where I met my wife Sara Gail, who was a nursing student there. But there is something about coming back home. I felt an obligation to come back. Sara Gail and I have been married 20 years and have two sons, Glenn, 19, and Lee, 11.

KMA: *You and your wife are active members of various organizations.*
Travis: Yes. Sara Gail was vice-chairman of the Fayette County Republican Party last year and is a member of the KEMPAC Board. I'm secretary of the Neurosurgical Society of America and the Joint Council of State Neurosurgical Societies.

KMA: *Any further comments?*
Travis: I honestly believe that prior to the development of KPC we were generally ignored when the topic of indigent care was raised. Now we are invited and asked to give an opinion. But the major accomplishment of this program is that it has helped a lot of sick people who might have been forgotten.

Donna M. Young



Highlights

1986 KMA Annual Meeting

Left to right: Wally O. Montgomery, M.D., Paducah, KMA Past President; Richard F. Hench, M.D., Lexington, KMA President; Peter C. Campbell, M.D., Louisville, Speaker of the House and Donald C. Barton, M.D., Corbin, KMA President-Elect.

Elections

Donald C. Barton, M.D., a family practitioner from Corbin, was chosen KMA President-Elect during the 136th Annual Meeting of the KMA House of Delegates. Doctor Barton has served KMA as Vice President, AMA Delegate and alternate Delegate, Chairman of the Board, 15th District Trustee and KEMPAC Chairman. He is a 1960 graduate of the University of Louisville School of Medicine.

Thomas R. Watson, M.D., Louisville, was elected Vice-President. Doctor Watson, an obstetrician/gynecologist, received his medical degree in 1961 from the University of Louisville School of Medicine. He served as KEMPAC Chairman for two years and currently serves on KMA Claims and Utilization Review Committee.

Peter C. Campbell Jr., M.D., Louisville, was elected to his second three-year term as Speaker of the House of Delegates. Doctor Campbell, an opthalmologist, is past president of the Jefferson County Medical Society and a graduate of the University of Louisville School of Medicine.

Danny M. Clark, M.D., Somerset, was named Vice Speaker of the House of Delegates. Doctor Clark, an obstetrician/gynecologist, has served two terms as KMA 12th District Trustee. He is past president of the Pulaski County Medical Society and a 1962 graduate of the University of Cincinnati College of Medicine.

Kenneth P. Crawford, M.D., a Louisville pediatrician and Russell L. Travis, M.D., a Lexington neurosurgeon, were elected AMA Delegates. Robert R. Goodin, M.D., Louisville, a specialist in cardiovascular diseases and Carl Cooper Jr., M.D., Bedford, a family practitioner, were both elected alternate Delegates to the AMA.

In other elections, the KMA House of Delegates elected J. Nicholas Terhune, M.D., Hopkinsville, Third District Trustee; Lucian Y. Moreman, II, M.D., Elizabethtown, Fourth District Trustee; David C. Liebschutz, M.D., Danville, 12th District Trustee and James R. Pigg, M.D., Pikeville, 14th District Trustee. Reelected was John D. Noonan, M.D., Paducah, First District Trustee.

Thomas R. Watson, M.D., Louisville, KMA Vice President.

Alternate Trustees elected were Salem M. George, M.D., Lebanon, Fourth District; Scott B. Scutchfield, M.D., Danville, 12th District and Deborah L. McIntyre, M.D., Hazard, 14th District.

Chairman of the Board, Nelson B. Rue, M.D., (L) administers the Presidential Oath-of-Office to Richard F. Hench, M.D.

Donald C. Barton, M.D., (center) receives congratulations from Peter C. Campbell, M.D., (L) and Charles C. Smith, Jr., M.D., after being chosen KMA President-Elect.

Reelected were James S. Gwinn, Jr., M.D., Paducah, First District and N.H. Talley, M.D., Princeton, Third District.

President's Luncheon

During the President's Luncheon, Hoyt D. Gardner, M.D., of Louisville, received the KMA Distinguished Service Award. Doctor Gardner, a surgeon, was honored for his commitment to the medical profession and the community. He has served as President of the Jefferson County Medical Society, the Kentucky Medical Association and the American Medical Association. In 1979, Doctor Gardner was honored by the University of Louisville, his alma mater, with its "outstanding alumni award." During the same year he received the Louisville Jaycees "outstanding citizen award" for his efforts on behalf of Louisville and Jefferson county.

Guest speaker for the President's Luncheon was John J. Coury, Jr., M.D., AMA President. In his presentation, Doctor Coury stressed the importance of physician involvement in maintaining control of patient care. He explained that the delivery of care has changed and cannot be reversed, but can be controlled as long as physicians remain the patients' advocate.

House of Delegates

During the first meeting of the House of Delegates on September 22, Jo-Ann Daus, AKMA past president, presented AMA/ERF checks to the two medical schools on behalf of the Auxiliary. Auxiliaries across the country raise funds annually for the AMA/ERF which are in turn proportionally returned to medical schools for educational purposes. A check for $18,616.87 was presented to the University of Kentucky College of Medicine, and $26,565.48 was presented to the University of Louisville College of Medicine.

Arthur H. Keeney, M.D., Louisville, was named the KMA Educational Award recipient. Doctor Keeney achieved dis-

Hoyd D. Gardner, M.D., (L) receives his Distinguished Service Award from S. Randolph Scheen, M.D., Chairman of the Awards Committee.

Max A. Crocker, M.D., Lexington, thanks the Auxiliary for the AMA/ERF check presented to the University of Kentucky Medical School.

Jo-Ann Daus, Louisville, Past President of the AKMA, presents an AMA/ERF check to Donald R. Kmetz, M.D., Dean of the U of L School of Medicine.

Arthur H. Keeney, M.D., Louisville, KMA Educational Award recipient.

tinction for his achievements in ophthalmology. He served as Dean of the University of Louisville School of Medicine from 1973 to 1980 when he became Dean Emeritus and Distinguished Professor of Ophthalmology. He is a former Ophthalmologist-in-Chief at the Wills Eye Hospital and Research Institute in Pennsylvania and served as Professor and Chairman of Opthalmology at Temple University.

A special Resolution was adopted during the House meeting confirming the leadership and accomplishments of Thomas L. Heavern, M.D., Vice Speaker of the House. Doctor Heavern resigned his position in September for health reasons. He has served the KMA in numerous capacities and is a recipient of the Association's highest honor, the Distinguished Service Award.

Reports of the KMA Committees and Resolutions were introduced during the first House of Delegates meeting. During the second meeting the House considered 31 Resolutions and 49 reports. The major action of the House was the adoption of Resolution F which directs that the Professional Liability Crisis (PLI) be the current priority of KMA. Following the 1986 Kentucky General Assembly, the ad hoc Committee on PLI continued its study of the liability crisis and developed a plan which was submitted to the KMA Board of Trustees and approved. The program calls for legislative adoption of 1985 House of Delegates proposals calling for KMA to push for changes in limitation of awards and adjustment of the statute of limitations as it pertains to minors.

Other House action included:

- Continuation of the Kentucky Physicians Care Program through December 1987.
- Referral of "Mandatory CME" recommendation back to the CME Committee for indepth review of the problem and the validity of mandatory CME for relicensure.

Harold L. Bushey, M.D., Barbourville, Chairman of KEMPAC, gives his report to the KMA House of Delegates.

KMA Delegates from left to right: Harold L. Bushey, M.D., Barbourville; Rufino F. Crisostomo, M.D., Barbourville; William D. Pratt, M.D., London and Carmel Wallace, Jr., M.D., Corbin.

- Support of mandatory seat belt legislation during the 1988 Kentucky General Assembly.
- Explore feasibility and risks to the physian and medical staff of possible alternatives to malpractice insurance (eg, escrow accounts or surety bonds) as a requirement of medical staff membership.
- Advising members of the Kentucky General Assembly of the situation of the high cost and potential unavailability of DPT vaccine and urging appropriate legislative relief.
- Request of assurance from all government agencies with medical review components and all third-party payors that peer review in the state be carried out by physicians actively engaged in medical practice in Kentucky, and, whenever possible, with similar experience and expertise.
- Address Blue Cross and Blue Shield on the issue of third-party fee discrimination, and, if necessary, legal action be considered against third-party payors who discriminate without justifiable cause against one's location of practice.

Five physicians were elected by the House of Delegates to serve on the 1987 Nominating Committee. Members elected were: Sally S. Mattingly, M.D., Lexington, Chairman; Alvin M. Churney, M.D., Louisville; John E. McCracken, M.D., Paducah; Deborah L. McIntyre, M.D., Hazard and James O. Willoughby, M.D., Bowling Green.

Attendance

Total registration for this year's Annual Meeting was 1,955, an increase over the past two years. The 1987 KMA Annual Meeting is scheduled for September 13-17, at the Ramada Inn East/Bluegrass Convention Center, Louisville.

KMA President Wally O. Montgomery, M.D., (R) presents a copy of the President's Citation Program for Private Sector Initiatives to Russell L. Travis, M.D., Lexington, Chairman of the Physicians Care Committee.

Richard F. Hench, M.D., addresses the second meeting of the House of Delegates indicating his commitment as the 1986-87 KMA President to help find solutions to the Professional Liability Crisis.

President Montgomery (L) presents a plaque to John C. Quertermous, M.D., Murray, to show appreciation for his years of service as President of the Board of Medical Licensure.

The Doctors' Band provided the music during the McDowell/Crawford Ball held for the second year during the KMA Annual Meeting.

A NEW EPHRAIM MCDOWELL BIOGRAPHY

"Honor to whom Honor is due." These words engraved upon a monument erected in memory of Kentucky's pioneer surgeon, Ephraim McDowell, are brought to life in Dr. Laman A. Gray, Sr's recent publication, *The Life and Times of Ephraim McDowell.* This book promises to be the most complete and documented chronicle of the life and accomplishments of Dr. McDowell renown as the "Father of abdominal surgery" for carrying out successfully an ovariotomy on his famous patient Jane Todd Crawford in 1809.

Dr. Gray, Sr., an outstanding surgeon and authority in gynecology and a renown author of many books and publications, is imminently qualified to recount the remarkable saga of McDowell's life. In addition to having received the Most Distinguished award of the Kentucky Medical Association in 1981, Dr. Gray has served as Clinical Professor of Obstetrics and Gynecology at the University of Louisville for many years and has been honored many times as President of numerous national surgical organizations. From 1965 to 1984 he served as Chairman of the Board of Managers of the McDowell House and Apothecary Shop and for many years prior to that was an active member of the Board of Managers.

Publication of *The Life and Times of Ephraim McDowell* by the University of Louisville was made possible by funds from the Gheens Foundation of Louisville and the Department of Obstetrics and Gynecology, University of Louisville School of Medicine.

All proceeds from the sale of the book will be donated to the Ephraim McDowell House and Apothecary Shop. The book may be ordered from the McDowell House for $9.95 plus $2.00 shipping and handling.

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McDowell House, 125 S. Second Street, Danville, Kentucky 40422

PLI is Topic of KEMPAC Seminar

Professional Liability Insurance was the topic for the KEMPAC Seminar held on Monday evening, September 22, 1986, at the Bluegrass Convention Center, Louisville, Kentucky.

James H. Sammons, M.D., Executive Vice President of the American Medical Association, was the keynote speaker. He informed the audience of physicians, legislators and guests of the professional liability insurance crisis. Doctor Sammons pointed out actions taken by the AMA and made recommendations for consideration for legislative and constitutional reforms on this subject.

Thomas R. Berglund, M.D., Chairman of the American Medical Political Action Committee, spoke on behalf of the AMPAC Board regarding its political activity this past year.

At the conclusion of the program, James S. Brashear, M.D., Central City, Kentucky, was presented a gavel and plaque recognizing his past two years as Chairman of the KEMPAC Board of Directors.

Harold L. Bushey, M.D., Barbourville, Kentucky, who presided at the KEMPAC Seminar, congratulated the Pike County Medical Society for its 100% membership in KEMPAC/AMPAC for 1986.

U.S. Senator Wendell H. Ford, (D) was guest during the KEMPAC Seminar.

State Senator Jack Trevey, M.D., Lexington, (L) talks with KMA Alternate Delegate Thomas K. Slabaugh, M.D., Lexington.

Pictured left to right James S. Brashear, M.D., James H. Sammons, M.D., Thomas R. Berglund, M.D., and Harold L. Bushey, M.D.

Top Recruiter Honored in Alternate Trustee Campaign

Harold D. Haller, Sr., M.D., (L) presents a gift to Donald J. Swikert, M.D., KMA Alternate Trustee for his work in membership recruitment.

Donald J, Swikert, M.D., Florence, was recognized during the 1986 Annual Meeting for his efforts in KMA's Alternate Trustee Membership Recruitment Campaign. Membership Committee Chairman Harold D. Haller, Sr., M.D., in presenting Doctor Swikert a McDowell House print, cited his 100 personal contacts in Boone, Campbell and Kenton counties which resulted in 24 new members and a commitment from 15 additional physicians to join in 1987. In accepting the award, Doctor Swikert challenged KMA's Delegates to "take it upon yourself to contact that new physician in your community and get them involved in your society and KMA."

In all, 81 members were recruited by KMA's Alternate Trustees during the peer-to-peer campaign period, June 1 through September 15, 1986, surpassing the goal of "Making Our Voice 5000 Strong." Membership, as of the Annual Meeting, stood at 5,122, an all-time record. Plaques were presented by Doctor Haller to those participating in the Campaign during the September 24 House of Delegates meeting.

Harold D. Haller, Sr., M.D., Chairman of the Membership Committee (center) presented plaques to alternate Trustees who worked during the membership recruitment campaign. From left to right: David C. Liebschutz, M.D., Danville; Nathaniel H. Talley, M.D., Princeton; James M. Pulliam, M.D., Franklin and James S. Gwinn, Jr., M.D., Paducah.

October 2, 1986

Wally O. Montgomery, M.D.
Immediate Past President
3532 Ephraim McDowell Drive
Louisville, KY 40205

Dear Wally:

I want to express my appreciation to you for the opportunity I had to attend the Kentucky Medical Association's recent Annual Meeting. My wife, Mavis, and I thoroughly enjoyed your gracious hospitality.

Congratulations on a successful annual meeting, and I look forward to maintaining the good relationship between our state societies.

Thank you again.

Sincerely,
Harry A. Springer, M.D.
Illinois State Medical Society First Vice-President

October 3, 1986

Wally O. Montgomery, M.D.
Immediate Past President
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

Dear Dr. Montgomery:

You and I have not met. I served as one of the speakers at the 136th Annual Kentucky Medical Association meeting. I want to thank you for the hospitality you and the Kentucky Medical Association showed me during my brief visit. I also want to thank you for the coffee mug and the goodies therein.

Congratulations to you, Max Crocker, and the Kentucky Medical Association for dedicating the meeting to a most important topic, care of the elderly. It was particularly meaningful to me for the Kentucky Medical Association to take the time and effort to honor those physicians who had been in the practice of medicine for fifty years or more.

Thank you for committing yourself and your service to organized medicine.

Sincerely,
Jon C. Calvert, M.D., Ph.D.
Professor and Chairman
Department of Family Medicine
Associate Dean for Clinical Sciences
Oral Roberts University School of Medicine

AMA Physician Recognition Award Recipients

Daniel Scott Adkins, M.D., Erlanger
Mahesh Agrawal, M.D., Louisville
Charles Franklin Allnutt, M.D., Covington
Milton Lee Brindley, M.D., Augusta
C. William Briscoe, M.D., Corbin
Joe Thomas Broderson, M.D., Lexington
Stuart Leon Brodsky, M.D., Mayfield
Keith Bryson, M.D., Bowling Green
William Kemper Burkhart, M.D., Lexington
Robert Charles Clear, M.D., Bellevue
Charles Glyndon Click, M.D., Stanford
Norman Katz Cohen, M.D., Louisville
Max Aldon Crocker, M.D., Lexington
Charles Grant Dye, M.D., Hopkinsville
Terrance Gregory Furlow, M.D., Lexington
John W. Geren, M.D., Lexington
Larry Paul Griffin, M.D., Louisville
Robert Allen Jacob, M.D., Louisville
James Christian Jensen, M.D., Campbellsville
Arthur H. Keeney, M.D., Louisville
Clifford Franklin Kerby, M.D., Berea
Robert Collin Kratz, M.D., Newport
Ullin W. Leavell, M.D., Lexington
Robert Theodore Longshore, M.D., Covington
Cecil D. Martin, M.D., Carrollton
Mortimer H. Moseley, M.D., Eddyville
Charles E. Rankin, M.D., Lexington
Ranjit Sinha, M.D., Morehead
Kenneth William Smith, M.D., Middlesboro
Richard Francis Smith, M.D., Lexington
Robert Winston Stigall, M.D., Danville
James H. Stuteville, M.D., Sonora
Robert Jerome Thomas, M.D., Ashland
Sam H. Traughber, M.D., Hopkinsville
William McClure Waller, M.D., Walton
Larry J. Wilson, M.D., Louisville
Mary Lucille Wiss, M.D., Pikeville
George H. Zenger, M.D., Louisville

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PHYSICIAN'S OFFICE PROTECTION

PICO, the Ohio physician-owned insurance organization that assisted in the formation of Kentucky Medical Insurance Company, is offering homeowners, auto and physician's office protection coverages to Kentucky physicians.

This means that Kentucky physicians can obtain coverage for their medical practice, homes, cars and other possessions, at very attractive rates, from companies that really have their best interests in mind.

PICO's insurance services in Kentucky are endorsed by the Kentucky Medical Association and are offered through KMA Insurance Agency, Inc., in cooperation with the Marketing Department of the Kentucky Medical Insurance Company. Call or write for more information.

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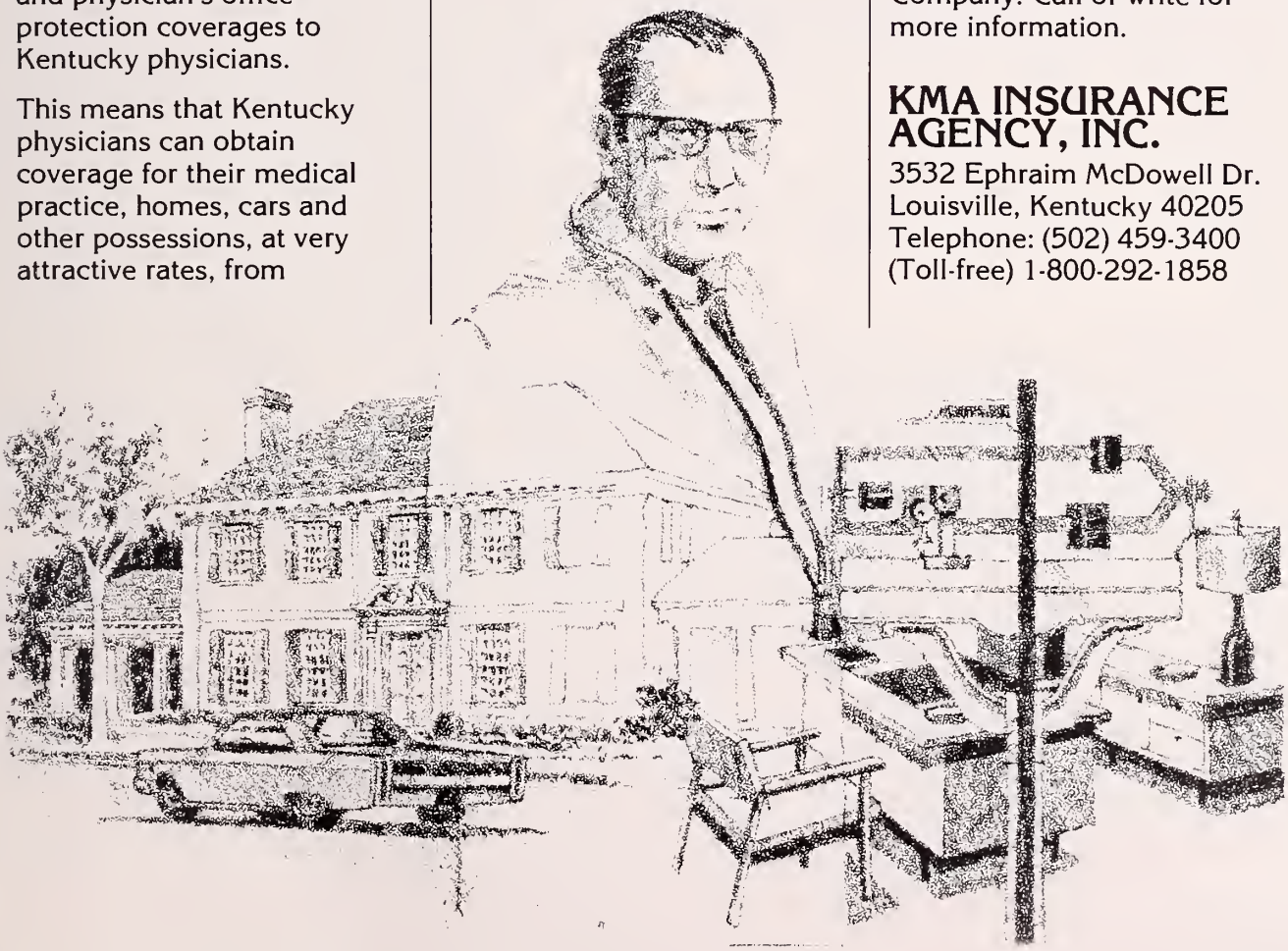
3532 Ephraim McDowell Dr.
Louisville, Kentucky 40205
Telephone: (502) 459-3400
(Toll-free) 1-800-292-1858



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All advertisements must be approved by the Board of Editors. Deadline is the first of the month two months preceding the month of publication. Charges for advertising are: 20¢ per word. Average word count: 7 words per line. $5.00 minimum. Send payment with order to: The Journal of KMA, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

KENTUCKY: Excellent emergency department opportunities available in two moderate volume hospitals. Directorship position also available. ACA physicians enjoy competitive compensation, paid malpractice, CME allotment, flexible scheduling, assistance with relocation expenses, paid life insurance and an opportunity to join a group health care plan. For detailed information, contact Acute Care America, 641 Sixth Street, Huntington, WV 25701; 1-800-231-0342 or 304-525-0852.

INTERNIST – FAMILY PRACTICE – OB/GYN — Board certified or Board eligible to join medical staff of a progressive hospital in small central Kentucky College town. Private practice opportunities available. . .internist to join established three physician practice. Send CV to Berea Hospital, Berea, KY 40403, Attn: Susan Henry.

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CONTROL
ACID RAIN
with once-a-night
h.s. therapy for active
duodenal ulcers

Only one tablet at bedtime

Controls nocturnal acid to relieve pain and heal duodenal ulcers

Heals active duodenal ulcers after 4 weeks in most patients*[1]

ZANTAC 300 mg h.s.	*270/320*	*84%*
ZANTAC 150 mg b.i.d.	*292/345*	*85%*

In well-controlled, double-blind, multicenter trials, ZANTAC 300 mg h.s. healed active duodenal ulcers in 84% of patients after 4 weeks. After 8 weeks, healing rates may be higher with ZANTAC 150 mg b.i.d. (92%) than with ZANTAC 300 mg h.s. (87%).

Relieves pain and other symptoms as effectively as ZANTAC 150 mg b.i.d.[1]

Zantac® 300

ranitidine HCl/Glaxo 300 mg tablets

Once-daily dosing may enhance compliance in patients for whom dosing convenience is important

Side-effects profile comparable to ZANTAC 150 mg b.i.d.[1-3]

Headache—sometimes severe—has been reported. Rare effects on the CNS, cardiovascular, GI, hepatic, and integumental systems have been observed, as well as rare cases of hypersensitivity reactions. See ADVERSE REACTIONS section of Brief Summary of Product Information before prescribing.

No significant interference with the hepatic cytochrome P-450 enzyme system at recommended doses

ZANTAC 300 mg h.s. had no significant drug interactions with theophylline or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH may be altered when ZANTAC or other medications which decrease gastric acidity are administered.

**It is not known exactly how much acid inhibition is needed to heal ulcers.*

Glaxo / ROCHE

See next page for references and Brief Summary of Product Information.

IN ACTIVE DUODENAL ULCERS

Once-a-night h.s. therapy controls acid rain

Zantac 300
ranitidine HCl/Glaxo 300 mg tablets

References: 1. Data available on request, Glaxo Inc. 2. Ireland A, Colin-Jones DG, Gear P, et al: Ranitidine 150 mg twice daily vs 300 mg nightly in treatment of duodenal ulcers. *Lancet* 1984;2:274-275. 3. Colin-Jones DG, Ireland A, Gear P, et al. Reducing overnight secretion of acid to heal duodenal ulcers. *Am J Med* 1984; 77 (suppl 5B):116-122.

ZANTAC® 150 Tablets (ranitidine hydrochloride)
ZANTAC® 300 Tablets (ranitidine hydrochloride)

BRIEF SUMMARY OF PRODUCT INFORMATION

See complete product information before prescribing. The following is a brief summary.

INDICATIONS AND USAGE: ZANTAC® is indicated in:
1. Short-term treatment of **active duodenal ulcer**. Most patients heal within four weeks.
2. **Maintenance therapy** for duodenal ulcer patients at reduced dosage after healing of acute ulcers.
3. The treatment of **pathological hypersecretory conditions** (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of **active, benign gastric ulcer**. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated.
5. Treatment of **gastroesophageal reflux disease (GERD)**. Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer, active, benign gastric ulcer, hypersecretory states, and GERD, concomitant antacids should be given as needed for relief of pain.

CONTRAINDICATIONS: ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

PRECAUTIONS: General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy. 2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function. Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

Laboratory Tests: False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Drug Interactions: Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day.

Ranitidine was not mutagenic in standard bacterial tests (*Salmonella, E coli*) for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

Pregnancy: ***Teratogenic Effects: Pregnancy Category B:*** Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: ZANTAC is secreted in human milk. Caution should be exercised when ZANTAC is administered to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Use in Elderly Patients: Ulcer healing rates in elderly patients (65 to 82 years of age) were no different from those in younger age groups. The incidence rates for adverse events and laboratory abnormalities were also not different from those seen in other age groups.

ADVERSE REACTIONS: The following have been reported as events in clinical trials or in the routine management of patients treated with oral ZANTAC®. The relationship to ZANTAC therapy has been unclear in many cases. Headache, sometimes severe, seems to be related to ZANTAC administration.

Central Nervous System: Rarely, malaise, dizziness, somnolence, insomnia, and vertigo. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

Cardiovascular: Rare reports of tachycardia, bradycardia, and premature ventricular beats.

Gastrointestinal: Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain.

Hepatic: In normal volunteers, SGPT values were increased to at least twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid IV for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

Musculoskeletal: Rare reports of arthralgias.

Hematologic: Rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Endocrine: Controlled studies in animals and man have shown no stimulation of any pituitary hormone by ZANTAC and no antiandrogenic activity, and cimetidine-induced gynecomastia and impotence in hypersecretory patients have resolved when ZANTAC has been substituted. However, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Integumental: Rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia.

Other: Rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

DOSAGE AND ADMINISTRATION: Active Duodenal Ulcer: The current recommended adult oral dosage is 150 mg twice daily. An alternate dosage of 300 mg once daily at bedtime can be used for patients in whom dosing convenience is important. The advantages of one treatment regimen compared to the other in a particular patient population have yet to be demonstrated.

Maintenance Therapy: The current recommended adult oral dosage is 150 mg at bedtime.

Pathological Hypersecretory Conditions (such as Zollinger-Ellison Syndrome): The current recommended adult oral dosage is 150 mg twice a day. In some patients it may be necessary to administer ZANTAC® 150-mg doses more frequently. Doses should be adjusted to individual patient needs, and should continue as long as clinically indicated. Doses up to 6 g/day have been employed in patients with severe disease.

Benign Gastric Ulcer: The current recommended adult oral dosage is 150 mg twice a day.

GERD: The current recommended adult oral dosage is 150 mg twice a day.

See full prescribing information for dosage adjustment for patients with impaired renal function.

HOW SUPPLIED: ZANTAC® 300 Tablets (ranitidine hydrochloride equivalent to 300 mg of ranitidine) are yellow, capsule-shaped tablets embossed with "ZANTAC 300" on one side and "Glaxo" on the other. They are available in bottles of 30 (NDC 0173-0393-40) and unit dose packs of 100 tablets (NDC 0173-0393-47).

ZANTAC® 150 Tablets (ranitidine hydrochloride equivalent to 150 mg of ranitidine) are white tablets embossed with "ZANTAC 150" on one side and "Glaxo" on the other. They are available in bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs of 100 tablets (NDC 0173-0344-47).

Store between 15° and 30°C (59° and 86°F) in a dry place. Protect from light. Replace cap securely after each opening.

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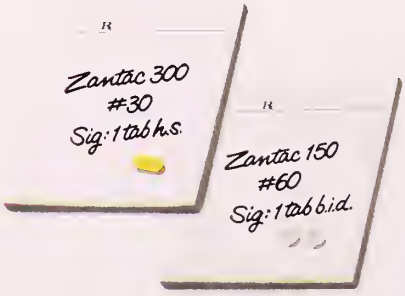
Two effective regimens to treat active duodenal ulcers:



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Was Your Delegate Present?
ROLL CALL
1986 House of Delegates
KMA Annual Meeting

OFFICERS

		First Meeting	Second Meeting
Speaker	Peter C. Campbell, Jr.	Present	Present
Acting Vice Speaker	Charles C. Smith, Jr.	Present	Present
President	Wally O. Montgomery	Present	Present
President-Elect	Richard F. Hench	Present	Present
Vice-President	Donald C. Barton	Present	Present
Secretary-Treasurer	S. Randolph Scheen	Present	Present
Delegate to the AMA	Fred C. Rainey	Present	Present
Delegate to the AMA	Donald C. Barton	Present	Present
Delegate to the AMA	Harold D. Haller, Sr.	Present	Present
Delegate to the AMA	Russell L. Travis	Present	Present
Alternate Delegate to the AMA	Kenneth P. Crawford	Present	Present
Alternate Delegate to the AMA	Wally O. Montgomery	Present	Present
Alternate Delegate to the AMA	Harold L. Bushey	Present	Present
Alternate Delegate to the AMA	Carl Cooper, Jr.	.....	.....

TRUSTEES

District			
First	John D. Noonan	.....	.....
Second	Albert H. Joslin	.....	.....
Third	Henry R. Bell	Present	Present
Fourth	Thomas R. Taylor	.....	.....
Fifth	Bob M. DeWeese	Present	Present
Sixth	Nelson B. Rue	Present	Present
Seventh	Cecil D. Martin	.....	.....
Eighth	William B. Monnig	Present	Present
Ninth	Kelly G. Moss	Present	Present
Tenth	Preston P. Nunnelley	Present	Present
Eleventh	Don E. Cloys	Present	Present
Twelfth	Danny M. Clark	.....	Present
Thirteenth	Jerald M. Ford	Present	Present
Fourteenth	Ronald D. Hall	.....	.....
Fifteenth	Emmanuel H. Rader	Present	Present

ALTERNATE TRUSTEES

District			
First	James S. Gwinn, Jr.	Present	Present
Second	John W. McClellan	Present	Present
Third	N. H. Talley	.....	Present
Fourth	Wreno M. Hall	.....	.....
Fifth	E. Dean Canan	.....	.....
Sixth	J. Michael Pulliam	Present	Present
Seventh	O. M. Patrick	.....	.....
Eighth	Donald J. Swikert	Present	Present
Ninth	Robert L. McKenney	Present	Present
Tenth	Thomas K. Slabaugh	Present	Present
Eleventh	William H. Mitchell	Present	Present
Twelfth	David C. Liebschutz	Present	Present
Thirteenth	Charles T. Watson	.....	.....
Fourteenth	James R. Pigg	Present	.....
Fifteenth	Rufino Crisostomo	Present	.....

PAST-PRESIDENTS

Past President	Charles C. Smith	Present	Present
Past President	James B. Holloway	.....	.....
Past President	Dwight L. Blackburn	Present	.....
Past President	Ballard W. Cassady	Present	.....
Past President	Frank R. Pitzer	.....	.....

DELEGATES
FIRST DISTRICT

		First Meeting	Second Meeting
BALLARD			
CALLOWAY	R. Gary Marquardt	Present	Present
	Dan Miller	Present	.....
CARLISLE			
FULTON			
GRAVES	Robert D. Fields	.....	.....
HICKMAN	Bruce C. Smith	.....	.....
LIVINGSTON	Stephen Burkhart	.....	.....
MCCRACKEN	C. Dale Brown	Present	Present
	Larry C. Franks	Present	Present
	Ronald L. Kelley	Present	Present
	John E. McCracken	Present	Present
	Roland H. Myers	Present	Present
	Luke D. Ross	Present	Present
MARSHALL	H. W. Ford	Present	.....

SECOND DISTRICT

DAVIESS	James E. Anderson	Present	Present
	Samuel C. DunLany	Present	Present
	R. Wathen Medley	.....	Present
	Wayne C. Myers	Present	Present
	Donald R. Neel	Present	Present
	Leslie M. Riherd	Present	.....
HANCOCK			
HENDERSON	Wayne C. Liles	Present	Present
	Paul E. Moore	Present	Present
MCLEAN			
OHIO	Eric N. Norsworthy	Present	Present
UNION	Fiorello Malubay	.....	.....
WEBSTER			

THIRD DISTRICT

CALDWELL	Nathaniel H. Talley	.....	Present
CHRISTIAN	Emmanuel J. Battah	Present	.....
	Patrick K. Fadahunsi	.....	Present
	J. Nicholas Terhune	Present	Present
CRITTENDEN			
HOPKINS	Wallace R. Alexander	.....	Present
	James M. Bowles	Present	Present
	Charles R. Dodds	Present	Present
	William H. Klompus	Present	Present
LYON	Delmas M. Clardy	Present	.....
MUHLENBERG	James S. Brashear	Present	.....
	William L. Miller	.....	Present
TODD	Harry J. Dempsey	.....	.....
TRIGG	Hector Eduardo Pavon	.....	.....

FOURTH DISTRICT

BRECKINRIDGE			
BULLITT	James R. Cundiff	Present	Present
GRAYSON	Ray A. Cave	Present	Present
GREEN	Elias A. Nalli	.....	.....
HARDIN-LARUE	William M. Carney	Present	Present
	Marion Douglass, Jr.	.....	Present
	William R. Handley	.....	Present
	Lucian Y. Moreman, II	.....	Present
HART	Clem E. Nichols	Present	Present
MARION			
MEADE	Raymond L. Mathis	Present	.....
NELSON	Fredricka C. Lockett	Present	Present
TAYLOR	Henry F. Chambers	Present	Present
WASHINGTON			

FIFTH DISTRICT

Jefferson	William Stephen Aaron	.....	Present
	Richard D. Allen	.....	.....
	Frank B. Alvey	Present	.....
	James G. Baker	.....	.....
	Arnold M. Belker	.....	Present
	Harold W. Blevins	.....	Present
	Alan M. Bornstein	.....	.....
	McHenry S. Brewer	.....	Present
	Charles Brohm	.....	Present
	Manual L. Brown, Jr.	.....	Present
	Jerry B. Buchanan	.....	Present
	William C. Buschemeyer	.....	.....
	Peter C. Campbell	Present	Present
	E. Dean Canan	.....	.....
	Alvin M. Churney	.....	Present
	Milton Comer	.....	.....
	Eugene S. Conner	.....	Present
	Samuel L. Cooper	Present	Present
	Bob M. DeWeese	Present	Present
	Larry D. Florman	.....	Present
	Daniel P. Garcia	.....	.....
	Norman Glazer	.....	Present
	Lawrence G. Goldberg	.....	.....
	Robert R. Goodin	.....	Present
	Larry Griffin	Present	Present
	Cecil L. Grumbles	Present	.....
	John J. Guarnaschelli	.....	.....
	Martha Keeney Heyburn	.....	Present
	Gary A. Hogge	.....	.....
	James S. Holtman	.....	.....
	Judy H. Holtman	.....	.....
	John G. Hubbard	.....	.....
	Walter I. Hume, Jr.	.....	Present
	Morton L. Kasdan	.....	.....
	Lowell D. Katz	.....	.....
	Arthur H. Keeney	Present	Present
	Donald Kmetz	Present	.....
	Joseph E. Kutz	.....	.....
	Jerome P. Lacy	.....	.....
	John A. Lloyd	.....	.....
	Aaron E. Lucas	.....	.....
	Martha T. McCoy	.....	.....
	Gorden T. McMurry	Present	Present
	Russell T. May	.....	Present
	Roy J. Meckler	.....	Present
	Syed Nawab	.....	Present
	David H. Neustadt	.....	Present
	Robert L. Nold	Present	Present
	Lynn L. Ogden, II	Present	Present
	Lafayette G. Owen	.....	.....
	Hobert L. Pence	.....	Present
	Henry W. Post	Present	Present
	James E. Redmon, Jr.	.....	.....
	K. Thomas Reichard	Present	Present
	Ben A. Reid, Jr.	.....	Present
	Barton S. Reutlinger	Present	Present
	Bernard F. Sams	Present	.....
	William J. Sandman	.....	Present
	G. Randolph Schrodt	.....	Present
	Jerry W. Seligman	.....	.....
	Charles C. Smith, Jr.	Present	Present
	Stephen Z. Smith	.....	.....
	Peter L. Thurman	.....	.....
	Robert S. Tillett	.....	Present
	Will W. Ward	.....	Present
	Thomas R. Watson	Present	Present
	Lolita S. Weakley	Present	Present
	Sam D. Weakley	Present	Present
	Barbara Weakley-Jones	Present	Present
	Larry J. Wilson	.....	Present
	Kenneth N. Zegart	.....	Present

SIXTH DISTRICT

ADAIR	Janice O. Aaron	.....	.....
ALLEN	Earl P. Oliver	Present	Present
BARREN	Lewis Dickinson	Present	Present
	Daryl P. Harvey	Present	Present
BUTLER	Richard T. Wan	.....	.....
CUMBERLAND			
EDMONSON	Omkar N. Bhatt	Present	Present
LOGAN			
METCALFE			
MONROE			
SIMPSON	J. Michael Pulliam	Present	Present
WARREN	John E. Downing	Present	Present
	Paul J. Parks	Present	Present
	James O. Willoughby	Present	Present

SEVENTH DISTRICT

ANDERSON			
CARROLL	Francis F. Palmer	Present	Present
FRANKLIN	John Gergen	Present	Present
	Willis McKee	Present	Present
GALLATIN			
GRANT			
HENRY	Wyatt Norvell	Present	Present
OLDHAM	Ed. G. Houchin	Present	Present
OWEN			
SHELBY	Anita R. Kotheimer	Present	Present
SPENCER	William K. Skaggs	.....	.....
TRIMBLE	Roderick H. MacGregor	Present	Present

EIGHTH DISTRICT

BOONE	David S. Ross, M.D.	.....	Present
	Donald J. Swikert	Present	Present
CAMPBELL-KENTON	Gordon W. Air	Present	Present
	Charles F. Allnutt	Present	Present
	Thomas E. Bunnell	Present	Present
	Steve W. Jennings	.....	.....
	Joel G. Kreilein	.....	.....
	Devinder S. Mangat	.....	.....
	Thomas M. Mayer	.....	.....
	Mark F. Pelstring	Present	Present
	Fred A. Stine	Present	Present
	Vincent E. Ziegler	Present	Present

NINTH DISTRICT

BATH			
BOURBON	James R. Biggs	.....	.....
BRACKEN	Milton L. Brindley	.....	.....
FLEMING	Robert W. Fidler	.....	.....
HARRISON	Don R. Stephens	Present	Present
MASON	Kelly G. Moss	Present	Present
NICHOLAS	Jack T. Morford	.....	.....
PENDLETON	Robert L. McKenney	Present	Present
ROBERTSON			
SCOTT	Larry D. Jones	.....	.....

TENTH DISTRICT

FAYETTE	John R. Allen	Present	Present
	Robert P. Belin	.....	.....
	William E. Blackburn	Present	Present
	Peter Bosomworth	Present	.....
	Max A. Crocker	Present	Present
	John D. Cronin	Present	Present
	W. Lisle Dalton	.....	Present
	Michael E. Daugherty	Present	Present
	Harold T. Faulconer	.....	Present
	John M. Fox	.....	Present
	Allen E. Grimes, Jr.	Present	Present
	Bill H. Harris	Present	Present
	Thomas M. Jarboe	Present	Present

	Dennis B. Kelly	Present	Present
	Paul G. Kyker, Jr.	.....	Present
	Sally S. Mattingly	Present	Present
	Edgar M. McGee	.....	Present
	William R. Meeker, Jr.	Present	Present
	W. N. Offutt	.....	Present
	John Poundstone	Present	Present
	E. C. Seeley	Present	.....
	Phillip A. Tibbs	.....	.....
	John E. Trevey	Present	Present
	Gary R. Wallace	Present	Present
JESSAMINE			
WOODFORD	C. Dale Goodin	.....	.....

ELEVENTH DISTRICT

CLARK			
ESTILL			
JACKSON			
LEE	Arnold L. Taulbee	.....	.....
MADISON	John M. Johnstone	Present	Present
	William H. Mitchell	Present	Present
MENIFEE			
MONTGOMERY	Lon E. Roberts, Jr.	.....	Present
	W. H. McKenna, M.D.	Present	.....
OWSLEY	Mildred B. Gabbard	.....	.....
POWELL			
WOLFE	Paul F. Maddox	.....	Present

TWELFTH DISTRICT

BOYLE	David C. Liebschutz	Present	Present
	Scott B. Scutchfield	Present	Present
CASEY	Lewis E. Wesley	Present	Present
CLINTON			
GARRARD	Paul J. Sides	Present	Present
LINCOLN	Charles E. Crase	Present	Present
MCCREARY			
MERCER	Nick G. Dedman	Present	Present
PULASKI	Arthur F. Schultz	.....	Present
	William T. Watkins	.....	Present
ROCKCASTLE			
RUSSELL	Charles E. Peck	Present	Present
WAYNE	James K. Phillips	Present	Present

THIRTEENTH DISTRICT

BOYD	Kenneth Hauswald	Present	Present
	Walter Cawood	Present	.....
	Paul E. Lett	Present	Ineligible
	Howard B. McWhorter	Present	Present
	Susan H. Prasher	.....	Present
	Bruce M. Stapleton	.....	Present
CARTER			
ELLIOTT			
GREENUP	Charles R. Lambert	Present	.....
LAWRENCE	George P. Carter	Present	.....
LEWIS			
MORGAN	Lillian Dyson	.....	.....
ROWAN			

FOURTEENTH DISTRICT

BREATHITT			
FLOYD	N. Roger Jurich	Present	Present
	Ragu R. Sundaram	.....	.....
JOHNSON	Joseph H. Rapier, Jr.	.....	Present
KNOTT			
LETCHER	Nilkanth B. Ranade	.....	Present
MAGOFFIN			
MARTIN			
PERRY	Deborah L. McIntyre	Present	Present
PIKE	Samuel J. King	Present	.....
	Russell H. Davis	Present	.....
	Mary L. Wiss	Present	Present

FIFTEENTH DISTRICT

BELL	Charles C. Moore, Jr.	Present	Present
	Kenneth W. Smith	Present	Present
CLAY	William E. Becknell, Sr.	Present	Present
HARLAN	R. Smith Howard	Present	Present
	James K. Hurlocker	Present	Present
KNOX	Roger A. Acosta	Present	Present
LAUREL	William D. Pratt	Present	Present
LESLIE			
WHITLEY	Roemer D. Pitman	Present	.....
	Carmel Wallace, Jr.	Present	Present

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the meetings of the House, September 22 and September 24.

STATEMENT OF OWNERSHIP MANAGEMENT AND CIRCULATION

(Required by 30 U.S.C. 3685)

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	Average no. copies each issue during preceeding 12 months	Single issue Published nearest to filing date
A. Total no. copies printed:	4635	4725
B. Paid circulation:		
1. Sales through dealers and carriers, street vendors and counter sales:	0	0
2. Mail subscriptions:	4051	4140
C. Total paid circulation:	4051	4140
D. Free distribution by mail, carrier or other means.		
1. Samples, complimentary, and other free copies:	517	528
E. Total distribution:	4568	4668
F. Office use left-over, unaccounted, spoiled after printing:	67	57
G. Total:	4635	4725

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14-058

The Charles Z. Aud, M.D. Memorial Meeting of the Kentucky Medical Association

Ramada Inn East/Bluegrass Convention Center
***Digest of Proceedings of the Regular Session of the**

House of Delegates

Peter C. Campbell, Jr., M.D., Louisville
Speaker of the House, Presiding

Peter C. Campbell, Jr., M.D., Speaker of the KMA House of Delegates, called the first meeting of the 136th session of the KMA House of Delegates to order at 9:00 a.m. on Monday, September 22, 1986. Following the Invocation given by Albert H. Joslin, M.D., Owensboro, the Chairman of the Credentials Committee, Don R. Stephens, M.D., Cynthiana, reported that a quorum was present.

A motion was made, seconded, and carried to approve the Minutes of the 1985 Session of the House of Delegates as published in the December 1985 *Journal of the Kentucky Medical Association*.

S. Randolph Scheen, M.D., Louisville, Secretary-Treasurer, reported that the Scientific Session would begin at 8:50 a.m. Tuesday, and the President's Luncheon would begin at 11:50 a.m. on Wednesday, at which time the new KMA President would be installed. Doctor Sheen reminded the Delegates that Reference Committees would convene at 2:00 p.m. Monday.

Doctor Scheen asked the Delegates to stand for a moment of silence in memory of their colleagues who had died since the 1985 Session of the House of Delegates:

Amos, B. Kirtley, Princeton
Boucher, Donald L., Paducah
Brogan, John W., Erlanger
Bushart, Robert W., Fulton
Caldwell, Harry, Danville
Caplinger, Carl B., Hopkinsville
Clarke, James A., Madisonville
Cole, Julian B., Henderson
Combs, Lyndon F., Hazard
DeLong, Henry F., Louisville
Greene, George G., Lexington
Hargett, Herbert P., Jeff., IN
Heitz, Raymond, Louisville
Hellebusch, Arthur A., Lexington
Herrmann, Henry C., Louisville
Houston, Hugh L., Murray
Kidd, Robert R., Louisville
Marcum, Aaron T., Lexington
Massie, Francis M., Versailles
McClure, George M., Danville
Morgan, Jr., William S., Paris
O'Neill, Richard P., Lexington
Overstreet, Sam A., Louisville
Picklesimer, Frank, Paintsville
Rush, Willett H., Frankfort
Siehl, John Hancock, Ludlow
Sloan, Warren E., Paducah
Slucher, Richard R., Louisville
Smiser, Harmon T., Cynthiana
Snyder, Grace, Frankfort

**Editorial Note: A tape recording was made of the two meetings of the House of Delegates, and any member who wishes to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recordings.*

Stege, George C., Louisville
Stone, Thomas B., Mayfield
Walker, James D., Louisville
Woolfolk, William L., Owensboro
Yancey, Charles R., Hopkinsville
Yocum, Thomas D., Lexington

The Speaker announced that each Delegate had a booklet, prepared by the Rules Committee, outlining the rules the House should follow in its deliberations.

Jo-Ann Daus, Louisville, immediate past president of the Auxiliary to KMA, presented AMA-ERF checks comprised of funds the Auxiliary had raised to benefit Kentucky's medical schools. Max A. Crocker, M.D. accepted a check for $18,616.87 on behalf of the University of Kentucky College of Medicine; and Donald R. Kmetz, M.D., Dean of the University of Louisville School of Medicine, accepted a check for $26,565.48.

Wally O. Montgomery, M.D., KMA President, presented the Educational Achievement Award to Arthur H. Keeney, M.D., Louisville. Doctor Montgomery then gave a plaque to John C. Quertermous, M.D., Murray, to express appreciation for his years of service to the profession through his presidency of the Board of Medical Licensure.

President Montgomery reported that KMA and Kentucky physicians participating in the Kentucky Physicians Care Program had been honored by the President's Citation Program for Private Sector Initiatives. He noted that KMA had received a "C-Flag" and was chosen from among more than 1,500 organizations to receive one of 70 citations presented in Washington, D. C. in June.

Doctor Montgomery asked Peter C. Campbell, Jr., M.D., Speaker, to accept the Citation on behalf of the House of Delegates, and also presented replicas of the Citation to Russell L. Travis, M.D., Lexington, and Brereton Jones, Midway, who provided much of the impetus for launching the Kentucky Physicians Care Program.

President Montgomery then introduced the following Resolution, on behalf of the Board of Trustees, and moved for its adoption. The motion was seconded and carried.

Resolution
Recognition of
Thomas L. Heavern, Jr., M.D.

WHEREAS, Thomas L. Heavern, Jr., M.D., has served the medical profession and this Association with distinction through the lifetime of his medical practice, and

WHEREAS, Doctor Heavern has brought notable leadership to the affairs and operations of this House as Vice Speaker, and

WHEREAS, this House, and this Association, have enjoyed progress, accomplishment, and the furtherance of our professional goals aided by the guidance and thoughtful contributions of Doctor Heavern, and

WHEREAS, for reasons of health, Doctor Heavern has regrettably tendered his resignation as Vice Speaker, now therefore be it

RESOLVED, that this House express its gratitude for Doctor Heavern's devotion and accomplishment, and its admiration for his service and dedication, and be it further

RESOLVED, that this House offers its sincere best wishes for Doctor Heavern's future and well-being, and be it further

RESOLVED, that this Resolution become a permanent record of the affairs of this body, and that the Resolution be forwarded to Doctor Heavern with our highest regards.

Charles C. Smith, Jr., M.D., Louisville, acting Vice Speaker, introduced the officers who in turn presented their Reports. The remaining list of Reports was read, and each was assigned to a Reference Committee:

Report Number		Reference Committee
1	Report of the President Wally O. Montgomery, Paducah	1
2	Report of the President, Auxiliary to KMA Jo-Ann Daus, Louisville	1
3	Report of the President-Elect Richard F. Hench, Lexington	1
4	Report of the Speakers, House of Delegates Peter C. Campbell, Jr., Louisville Thomas L. Heavern, Highland Heights	1
5	Report of the Chairman, Board of Trustees Nelson B. Rue, Bowling Green	1
6	Report of the Secretary-Treasurer S. Randolph Scheen, Louisville	1
7	Report of the Editor A. Evan Overstreet, Louisville	1
8	Report of the Delegates to AMA Fred C. Rainey, Elizabethtown	1
9	Report of the Executive Vice President Robert G. Cox, Louisville	1
10	Report of the Advisory Committee to AKMA Charles C. Smith, Jr., Louisville	1

11	Kentucky Physicians Care Operating Committee Russell L. Travis, Lexington	1
12	KMA Physicians Services, Inc. Nelson B. Rue, Bowling Green KMA Insurance Agency, Inc. Dwight L. Blackburn, Louisville Kentucky Medical Management & Computer Operations, Inc. Richard F. Hench, Lexington	1
13	Kentucky Medical Insurance Company Ballard W. Cassady, Pikeville	1
14	Scientific Program Committee Max A. Crocker, Lexington	2
15	Scientific Exhibits Committee Richard A. Kielar, Lexington	2
16	Continuing Medical Education Committee James E. Redmon, Jr., Louisville	2
17	Council for Continuing Medical Education James E. Baumgarten, Louisville	2
18	Cancer Committee P. Raphael Caffrey, Lexington	2
19	Hospital Committee John D. Perrine, Lexington	2
20	Emergency Medical Care Committee E. Truman Mays, Somerset	2
21	Physician Manpower Committee Robert P. Goodin, Louisville	2
22	Interspecialty Council Paul J. Parks, Bowling Green	2
23	Hospital Medical Staff Section William B. Monnig, Edgewood	2
24	Maternal Mortality Study Committee John W. Greene, Jr., Lexington	3
25	Committee on National Legislative Activities Fred C. Rainey, Elizabethtown	3
26	Committee on State Legislative Activities Carl Cooper, Jr., Bedford	3
27	Committee on Impaired Physicians David L. Stewart, Louisville	3
28	Committee on Care for the Elderly John C. Wright, II, Louisville	3
29	President, Blue Cross and Blue Shield G. Douglas Sutherland, Louisville	4
30	Committee on Medical Insurance and Prepayment Plans Earl P. Oliver, Scottsville	4
31	Committee on Claims and Utilization Review K. Thomas Reichard, Louisville	4
32	Coordinating Commission on Peer Review Activities J. Campbell Cantrill, Georgetown	4
33	Committee to Investigate Changing Trends in Medicine Charles C. Smith, Jr., Louisville	4
34	Committee on Maternal and Child Health Danny M. Clark, Somerset	5
35	Committee on Medicare and Other Governmental Medical Programs James A. Baumgarten, Louisville	5
36	Committee on Health Planning Frederick A. Stine, Highland Heights	5
37	Technical Advisory Committee on Physician Services (Title XIX) Harold L. Bushey, Barbourville	5
38	Committee on Community and Rural Health Don R. Stephens, Cynthiana	5
39	Committee on School Health, Physical Education, and Medical Aspects of Sports R. Quin Bailey, Danville	5
40	Subcommittee on Youth Education R. Quin Bailey, Danville	5
41	Advisory Committee to CHR Nelson B. Rue, Bowling Green	5
42	Judicial Council Earl P. Oliver, Scottsville	6
43	Rural Kentucky Medical Scholarship Fund Carolyn H. McKinley, Glasgow	6
44	Physician-Attorney Liaison Committee Thomas M. Marshall, Louisville	6
45	Membership Committee Harold D. Haller, Sr., Louisville	6
46	Committee on Constitution and Bylaws Robert L. McClendon, Louisville	3
47	McDowell House Board of Managers David W. Kinnaird, Louisville	6
48	Medical Student Section Gary L. Reasor, Louisville	6
49	Resident Physicians Section R. Mont Wood, Madisonville	6

New Business

New Business was referred to the House by the Speaker and referred to the Reference Committee indicated:

Resolution	Submitted By	Subject	Reference Committee
A	Board of Trustees	Amendment of the Legal Trust Fund	1

B	McCracken County Medical Society	Disclosure of Hospital Patient Care Activities	2
C	McCracken County Medical Society	Peer Review Qualifications	4
D	McCracken County Medical Society	Alternatives to Malpractice Insurance	3
E	McCracken County Medical Society	Hospital Self-Insurance	3
F	Board of Trustees	Professional Liability Campaign Plan	3
G	Resident Physicians Section	Socioeconomic Education for Housestaff Physicians	6
H	Fayette County Medical Society	Organ Donor Cards	2
I	Fayette County Medical Society	KMA Committee Structure	6
J	Fayette County Medical Society	Alternative Delivery Systems	4
K	Warren County Medical Society	Opposition to PRO Sanction Process	5
L	Franklin County Medical Society	Notice of Mandatory Second Opinion Reports	4
M	Franklin County Medical Society	Timely Mailing of KMA Delegate's Packet	1
N	Tri-County Medical Society (Shelby, Henry and Oldham)	Third-Party Fee Discrimination in Kentucky	4
O	Mercer County Medical Society	Dues Increase for Professional Liability Campaign Plan	3
P	Jefferson County Medical Society	Temporary Dues Increase	3
Q	Jefferson County Medical Society	Patient Care Directed by Insurors	4
R	Jefferson County Medical Society	Third-Party Certifiers' Demands	4
S	Jefferson County Medical Society	Revised Standard HCFA-1500 Claim Form	5
T	Jefferson County Medical Society	Ethical and Scientific Leadership	6
U	Jefferson County Medical Society	Legislative Session on Liability Insurance	3
V	Harold L. Bushey, M.D.	Kentucky Medical Assistance Program	5
W	Fayette County Medical Society	Office of the Commissioner of Insurance	4
X	Fayette County Medical Society	Post-surgical Ophthalmological Care	6
Y	Fayette County Medical Society	Seat Belt Legislation	3
Z	Fayette County Medical Society	Standard Medical Insurance Form	4
AA	Fayette County Medical Society	House of Delegates Actions	1
BB	Board of Trustees	Peerview Committees	4
CC	Board of Trustees	Effects of Liability on Vaccine Availability	3
DD	William B. Monnig, M.D.	KMA-Endorsed Medical Insurance Program for the Membership	4
EE	Kentucky OB/GYN Society-Ky. Section ACOG	Liability Insurance	3

Doctor Smith announced the meeting locations for the Nominating Committee and for Trustee Districts electing Trustees and Alternate Trustees. He reminded the Delegates that the Nominating Committee would report at the close of the first Scientific Session on Tuesday morning.

The names of the members of the Nominating Committee were announced: Paul J. Sides, M.D., Lancaster, Chairman; James S. Brashear, M.D., Central City; William H. Klompus, M.D., Madisonville; William D. Pratt, M.D., London; and Mary L. Wiss, M.D., Pikeville.

Speaker Campbell adjourned the first meeting at 10:55 a.m.

Second Meeting

Speaker Campbell called the second meeting of the 1986 session of the House of Delegates to order at 6:05 p.m. Doctor Campbell asked Paul J. Parks, M.D., Bowling Green, to give the Invocation, and the Chairman of the Credentials Committee, Don R. Stephens, M.D., reported a quorum was present. Doctor Campbell announced that John M. Johnstone, M.D., Richmond; John W. McClellan, Jr., M.D., Henderson and J. Nicholas Terhune, M.D., Hopkinsville, would serve as Tellers.

Secretary-Treasurer Scheen recognized guests from neighboring state medical associations who had attended the Annual Meeting. Included were Paul Siebenmorgen, M.D., President, Indiana State Medical Association; John E. Albers, M.D., President, Ohio State Medical Association; Charles E. Turner, M.D., President, West Virginia State Medical Association; Richard L. Fields, M.D., President-Elect, Medical Society of Virginia; and Harry A. Springer, M.D., First Vice President, Illinois State Medical Society.

Unfinished Business

The Chairman of the Board of Trustees, Nelson B. Rue, M.D., Bowling Green, presented a motion on behalf of the Board, that Harold L. Bushey, M.D., Barbourville, be elected to another four-year term on the KMA Judicial Council. The motion was seconded from the floor and carried.

Editorial Note: Unless otherwise indicated, the Reference Committee action on each Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.

Report of Reference Committee No. 1

Robert R. Goodin, M.D., Louisville
Chairman

Reference Committee No. 1 considered the following Reports and Resolutions:

1. Report of the President
2. Report of the President, Auxiliary to KMA
3. Report of the President-Elect
4. Report of the Speakers, House of Delegates
5. Report of the Chairman, Board of Trustees
6. Report of the Secretary-Treasurer
7. Report of the Editor
8. Report of the Delegates to AMA
9. Report of the Executive Vice President
10. Report of the Advisory Committee to AKMA
11. Report of the Kentucky Physicians Care Operating Committee
12. Report of KMA Physicians Services, Inc.
    KMA Insurance Agency, Inc.
    Kentucky Medical Management & Computer Operations, Inc.
13. Report of the Kentucky Medical Insurance Company
    Resolution A—Amendment of the Legal Trust Fund (Board of Trustees)
    Resolution M—Timely Mailing of KMA Delegate's Packet (Franklin County Medical Society)
    Resolution AA—House of Delegates Actions (Fayette County Medical Society)

ITEMS FOR CONSENT

Reference Committee No. 1 reviewed the following items and recommends they be filed as indicated, by the consent of the House, without discussion:

2. Report of the President, Auxiliary to KMA — filed
3. Report of the President-Elect — filed
4. Report of the Speakers, House of Delegates — filed
5. Report of the Chairman, Board of Trustees — filed
6. Report of the Secretary-Treasurer — filed
7. Report of the Editor — filed
8. Report of the Delegates to AMA — filed
9. Report of the Executive Vice President — filed
10. Report of the Advisory Committee to AKMA — filed
12. Report of KMA Physicians Services, Inc. — filed
    KMA Insurance Agency, Inc. — filed
    Kentucky Medical Management & Computer Operations, Inc. — filed
13. Report of the Kentucky Medical Insurance Company — filed

Report of the President, Auxiliary to KMA

"Keeping Pace with Tomorrow" was the Auxiliary theme for the year 1985-86. The message was conveyed in the President's inaugural address . . . "With the help of all members, we can achieve a year of distinction for a better tomorrow."

The year of distinction began with a Leadership Conference in April 1985 at the Seelbach Hotel. "Working with the Media" was the subject of the conference. Speakers included Liz Everman, Co-Anchor, WLKY-TV; Katie Clauber, Public Relations Director, WHAS, Inc.; and Bob Domine, Sportscaster, WAVE-TV 3. We were honored to have attending this conference Pat Durham, President-Elect of the American Medical Association Auxiliary. State leaders outlined their plans for the year in Health, Safety, and Membership.

The first Ephraim McDowell-Jane Todd Crawford Ball was held on Sunday, September 29, 1985, at the Galt House for the benefit of the McDowell House in Danville, Kentucky. Doctor Charles Smith, President of the Kentucky Medical Association, invited the Auxiliary to serve on the Ball Committee. With the assistance of Kentucky Medical Association staff, Katherine Roser, Betty Schrodt, and Anne Arena, and support from Doctor Smith and Doctor David Kinnaird, the Ball was a delightful success.

The Auxiliary's Fall Board Meeting was held in conjunction with the Kentucky Medical Association's 1985 Annual Meeting at the Galt House. Emphasis was on Education and Hospitality. Doctor Wally Montgomery, KMA President-Elect, addressed the Board of Directors. Dean Robin Powell, University of Kentucky College of Medicine, and Dean Donald Kmetz, University of Louisville School of Medicine, addressed the Board of Directors and expressed their gratitude for the Auxiliary's support in fundraising for the medical schools. State chairmen held workshops on the American Medical Association Education Research Foundation (AMA-

ERF); Health and Safety, for county presidents and county committee chairmen.

The business meeting was followed by a luncheon and fashion show to benefit the McDowell House Challenge Grant Fund. Seminars on "Adolescent Depression and Suicide" and "Coping with Malpractice Litigation" followed in the afternoon.

The American Medical Association Auxiliary Leadership Confluence was attended by the state Auxiliary President, President-Elect, and county Presidents-Elect from Daviess, Fayette, Jefferson, and McCracken. How to cope with professional liability, insight on impairment of physicians and their families, and reasons for rising costs of medical care, were among subjects of seminars for this meeting.

The Auxiliary had a substantial increase in membership on the national level and a slight decrease at the state level. The Membership Committee designed and published a new membership brochure. The greatest membership potential is in the counties of our state where there are no organized auxiliaries. The county activities and projects vary according to size, location, etc. County auxiliaries were encouraged to evaluate the needs of their members and communities and plan programs and projects accordingly.

Communication remains the vital link that makes a viable auxiliary; therefore, the President's eight newsletters provided this service to the Board members and national leaders. Four issues of the state newspaper, the *Bluegrass News*, were sent to all members and national leaders.

In keeping pace with tomorrow, the Auxiliary expanded its horizons by working in conjunction with the Kentucky Seat Belt Coalition in order to promote the use of seat belts; Jewish Hospital and the Circuit Court Clerks Association of Kentucky, to encourage the public to give the gift of life through organ donation, and the Kentucky Medical Insurance Company. KMIC provided lawyers for the Malpractice Seminars sponsored by the Auxiliary throughout the state.

At the request of the Auxiliary, Governor Martha Layne Collins signed a proclamation designating March 30, 1986, as Doctor's Day in Kentucky. A Resolution commemorating Doctors' Day by using seat belts was sent by the state Auxiliary to all county presidents and the media in their areas, and letters were sent to all Kentucky hospitals asking them to remember physicians in some small way on March 30, 1986.

The 64th Annual Convention of the Auxiliary was held at the Brown Hotel April 21-23, 1986. Special guests and speakers were: Wally O. Montgomery, M.D., President, Kentucky Medical Association; Mary Kay McPhee, President, American Medical Association Auxiliary; and Margaret Ann Morgan, President, Southern Medical Association Auxiliary. The county auxiliaries provided items for an auction at the Annual Convention for the benefit of the state's two Ronald McDonald Houses.

The Auxiliary is sincerely grateful to the Kentucky Medical Association for its financial support and to the staff for their cooperation. Without the services of our secretary, Sue Tharp, the Auxiliary would miss the valuable asset every organization needs—continuity in spite of annual changes in leadership.

It has been this President's honor and pleasure to represent the Auxiliary at the Kentucky Medical Association meetings; American Medical Association Auxiliary Convention; Southern Medical Association Auxiliary Annual Convention; McDowell House Board meetings; Jewish Hospital Press Conference and especially the numerous meetings of county auxiliaries.

The Auxiliary had 100% county participation in contributions to the American Medical Association Education Research Foundation. The state Auxiliary reports an outstanding year in its project for AMA-ERF. Opportunities for two rooms at the Hyatt in Lexington and four tickets for the University of Kentucky/University of Louisville basketball game netted over $5,000 for the medical schools. It was indeed the support of all counties that provided the over 25% increase in contributions to AMA-ERF. We are proud of our final total of $41,907. The Auxiliary is committed to assist in providing funds for quality medical education in Kentucky.

On behalf of the state officers and members of the Auxiliary to the Kentucky Medical Association, "congratulations" to Carol Franks, state Chairman for the American Medical Association Education Research Foundation. Kentucky received three awards for AMA-ERF participation and contributions in 1985-86. Congratulations, also, to the Boyd County Medical Society Auxiliary. Boyd County received an award for the largest per capita contribution for a county in the nation.

It was an honor to serve as Delegate to the American Medical Association Auxiliary House of Delegates and receive these awards on behalf of all Auxiliary members.

Jo-Ann Daus
President

Report of the President-Elect

As your President-Elect, I have been honored with a year of service which has enabled me to observe, participate, consider, and reflect on the many challenges and changes our Association and our profession have faced this year.

Of abiding interest to me has been the very able leadership the Association enjoys through the Board of Trustees and the Officers, particularly President Wally Montgomery, M.D. As a point of personal privilege, I would like to note Wally's many efforts. As President, he has probably devoted more time to the job than any other Officer on a day-to-day basis. It is also important to note the capable and solid leadership of Nelson Rue, M.D., as Chairman of the Board of Trustees. He brings a firm dignity to all of the Board's undertakings and is adept at turning controversy into consensus.

The litany of issues the Association has dealt with is long, but a few of these matters should be highlighted. We have witnessed continued restrictions in the Medicare Program, both with regard to availability of services and reimbursement. At the time this is being written, Congress is in heated discussion over Program changes for fiscal year 1987. The viability of this Program is strongly in question, and the quality of care rendered through it is certainly jeopardized.

This year saw the institution of the KenPAC Program under Medicaid, which suffers more woes than Medicare. It's too soon to determine the impact of KenPAC, but Medicaid, too, is reaching a critical point. The Program is barely able to operate at levels whose adequacy might be questioned. Of major concern is the fact that Medicaid is not available to a great number of the state's indigent.

On a positive note, our own Kentucky Physicians Care Program is providing some relief in filling the gap between Medicaid eligibility and medical indigency. While it is a laudable achievement, everyone is probably in agreement that it merely formalizes a method of care delivery that is a long-standing tradition of the profession.

The Kentucky General Assembly convened this year. Its recess produced many positive results for medicine, although legislative attention to the liability insurance crisis was not adequate. Political representation, of course, was not confined to the Kentucky General Assembly. Communication with the Kentucky delegation to the United States Congress, as well as many Federal agencies, was a weekly activity.

KMA began a new activity this year to study physician manpower needs, and it would appear that an objective review of this important issue is difficult to achieve. Even though trends cannot be accurately predicted presently, this is an effort that needs ongoing address. Related to the manpower study has been the work of KMA's Membership Department, which has produced interesting information and has made some positive strides in membership recruitment and retention. Everyone's help is needed in this area.

Finally, KMA has grappled all year with the professional liability insurance problem. During my tenure as President, I hope to continue and increase this activity. Many members may have been hopeful that the General Assembly would have produced a panacea to the liability crisis, but any successful legislative efforts are unlikely to produce a resolution of the matter for some years because of the cyclical nature of the crisis.

In addition to legislative efforts, KMA has been instrumental in developing a coalition of business and professional groups to work together on the problem and is represented on a liability insurance commission to study the matter, which was appointed by the General Assembly. In a different arena, the Kentucky Medical Insurance Company is studying a number of possible solutions and has increased its work in loss prevention.

Finally, the KMA Ad Hoc Committee on Professional Liability Insurance, representing a variety of medical interests, worked throughout the year to develop an overall strategy program on liability insurance which proposes to approach the problem in a number of ways. This is being presented to you as Resolution F, and will be the subject of a special meeting of Reference Committee No. 3, beginning at 3:00 p.m. on Monday afternoon during the Annual Meeting. In addition, a special meeting, open to everyone, is scheduled for Sunday afternoon so that anyone with a concern will have a forum to express it, whether he is a member of the House or not. I would urge you to attend both of these meetings so that we can develop a consensus for a program to resolve the professional liability matter.

I deeply appreciate the honor of serving you and pledge my every effort to fulfill your confidence.

Richard Hench, M.D.
President-Elect

Report of the Speakers, House of Delegates

Your Speakers would like to welcome you to the 136th Annual Meeting of the Association and would like to invite all members to attend. Even though final policy is set by the Delegates, it is appropriate that every member take part in the discussions upon which Association policy is based.

Your close and thoughtful attention is directed to each of the items contained in the packet received by Delegates. A major item in this packet is a special folder which contains Resolution F and accompanying material dealing with the professional liability insurance issue. Resolution F proposes a number of activities by KMA directed to liability insurance matters, including a suggested dues increase upon which you will be asked to vote. A special meeting of Reference Committee No. 3 will be convened at 3:00 p.m. to deal solely with Resolution F and professional liability insurance matters.

Other items included in your packet are a "Guide for Writing Resolutions," a "Rules Booklet," which provides standing rules of the House and "Instructions to Delegates." The deadline for submitting Resolutions is September 15, or seven days prior to the first meeting of the House of Delegates. Any individual or society who would like to have assistance in composing a Resolution should contact the KMA Headquarters Office. The "Rules Booklet" is intended to complement the Constitution and Bylaws and to assist in the operation of the meetings of the House. No new rules have been proposed this year.

The Rules Committee and the Speakers will be available throughout the meeting to counsel any Delegate on any issues that may arise, and Delegates are urged to seek any assistance required. We appreciate your confidence in selecting us to serve you and pledge our total effort to that service.

Peter C. Campbell, Jr., M.D., Speaker
Thomas L. Heavern, M.D., Vice Speaker

Report of the Chairman, Board of Trustees

While thanking your for the honor of serving as the Chairman of your Board of Trustees this past year, I am especially grateful for all the Board members you elected to serve with me. The 1985-86 Associational year was probably the busiest and most demanding in our history. Your Board members and Officers no doubt volunteered more time and effort to try to meet the many challenges presenting themselves to us than ever before.

In addition to the multitude of forces facing Medicine today, 1986 was also a legislative year. While the effort of staff and leadership was accelerated, we did not enjoy success to the extent we did in 1984. We sought liability insurance reform, as did many other groups and corporations. All of us were unsuccessful in that regard. One of KMA's goals, however, was to have a task force appointed. The Kentucky General Assembly did that through HJR 139, and it was appointed in July. We hope good things come from it. Additionally, as advocates of our patients and quality care, we were disturbed to see the passage of two bills by paraprofessionals, one expanding a scope of practice, and another mandating insurance benefits. On the other hand, we were successful in much of our effort as 24 of the 26 bills we opposed did not pass, and 13 of the 18 we supported did pass.

While I thank all who participated in the legislative process on behalf of KMA, and there were many, I especially want to acknowledge our Legislative Chairman of ten years who is retiring from that position this year, Doctor Carl Cooper. His contribution has been immense, and I am lost for appropriate words to say "thank you" for the entire KMA membership. His vision, leadership, and camaraderie on the firing line will be missed.

Professional liability is an issue of great concern to every physician in this state, and in the entire country for that matter. Today we are joined by numerous other groups and businesses which now share in our concern. This is an issue that demands our united effort. We must maintain its priority status and work diligently, both within and outside the profession, toward resolution of this crisis. It will take time, funds, effort, and a cooperative spirit on everyone's part. A separate report addresses this issue and I urge your study and support of it.

Many other substantial matters have similarly taken place throughout the year. There have been many well-planned, well-attended seminars, workshops, *etc*, designed to help us as physicians. Nearly 50 KMA committees have been busy helping us in our daily activities and their reports speak for themselves.

Major efforts like the Kentucky Physicians Care Program have been ongoing and a salute to all Kentucky physicians who participate in it was made by President Ronald Reagan in June. KMA President, Wally O. Montgomery, M.D., accepted on KMA's behalf the

President's Citation for Private Sector Initiatives. The presentation was made in our nation's capital, and we are indeed honored to receive such recognition when only 100 awards were presented nationwide. A special thanks is extended to the KPC Operating Committee and its Chairman, Russell Travis, M.D., and to each of you who participate.

Kentucky Medical Management & Computer Operations, Inc. was sold to Community Mutual Insurance Company of Ohio (CMIC). KMA's final 20% ownership was transferred in June. With its new owner and financial backing, it is hoped that KMCO will achieve much success. The KMA Physicians Financial Services, Inc., a Federal Credit Union, was merged April 1 of this year with TELCO, the credit union of South Central Bell. The merger brought the Credit Union's assets to well over 40 million dollars, and with even more services, it should continue to be an excellent fringe benefit to the membership.

The environment in which we live, competition, and all of its ramifications have a great impact on us and on KMA. Time and space prohibit detailed reporting on KMA's efforts day to day on our behalf. The committee reports help do that. KMA is the only organization all physicians in this state have to rally around . . . and I urge that we all rally. Our membership is up for another new record, but we have physicians throughout the state who are not members. Please join me in asking them to be a part of our organization. We are working for them too . . . and we are working hard.

Again, I want to thank the individual Board members, the staff, the committee members, the House of Delegates, and all of our membership for your dedicated efforts and support this past year. Without our united approach, nothing could be accomplished; with it, practically anything can be achieved.

The following summary of Board meetings will assist you in assessing the scope of your Board's activities this year. Complete Minutes of all Board of Trustees and Executive Committee meetings will be provided to Reference Committee No. 1.

Each year a report of the Legal Trust Fund is included in the Chairman's Report. At the present time the Fund totals $92,141.72. Expenditures were made during this Associational year in the amount of $15,000.

Summary of Board Meetings

First Meeting, October 3, 1985

Acting as temporary Chairman, KMA Secretary-Treasurer, S. Randolph Scheen, M.D., introduced the newly elected members of the Board and the new Officers: Richard F. Hench, M.D., Lexington, President-Elect; Donald C. Barton, M.D., Corbin, Vice President; Cecil D. Martin, M.D., Carrollton, Trustee, Seventh District; Kelly G. Moss, M.D., Maysville, Trustee, Ninth District; and Jerald M. Ford, M.D., Ashland, Trustee, Thirteenth District.

The Board elected the Executive Committee members to serve with the President, President-Elect, Vice President, and Secretary-Treasurer for the 1985-86 Associational year. Nelson B. Rue, M.D., Bowling Green, was elected Chairman of the Board, and Henry R. "Hank" Bell, M.D., Elkton, was elected Vice Chairman. Danny M. Clark, M.D., Somerset, and Bob M. DeWeese, M.D., Louisville, were also named to the Executive Committee as Trustees at Large.

It was noted that the KMA Executive Committee members also serve as the Board of Directors of KMA Physicians Services, Inc. (KMA's holding company).

The Board members made changes to the Kentucky Foundation for Medical Care Board of Directors in accordance with KFMC's Bylaws, and appointed KMA Committees for the 1985-86 Associational year.

The Board voted to hold the 1986 Annual Meeting at the Ramada Inn/Bluegrass Convention Center in Louisville.

Second Meeting, December 4-5, 1985

The KMA Board of Trustees held its second meeting of the Associational year at the Headquarters Office on December 4-5, 1985.

Following the Headquarters Office Report, Reports of the KMA President and Auxiliary President, Report of the Senior Delegate to AMA and Secretary of the Board of Medical Licensure, the Board members received reports from the Board Chairmen of KMA Physicians Services, Inc., and KMA Physicians Financial Services, a Federal Credit Union.

The Board of Trustees adopted a position statement developed by the KMA Judicial Council regarding the use and prescription of anabolic steroids to increase athletic performance; endorsed a workers' compensation plan offered by the Dodson Insurance group; and accepted renewal rates for the Blue Cross and Blue Shield Group Plan for KMA members, noting that the low option group experienced a 15% decrease in rates.

At the direction of the House of Delegates, the Board members made several recommendations to the Cabinet for Human Resources on a pamphlet CHR had pub-

lished on breast cancer treatment and made recommendations to the Governor for appointments on the Athletic Trainers Advisory Council and the Kentucky Board of Licensure for Nursing Home Administrators.

The Board members then reviewed a handout listing legislative issues of interest to KMA and another specifically detailing the House of Delegates' directives regarding tort reform. The Board endorsed the Board of Medical Licensure's proposal to amend the Medical Practice Act to allow for certification of Physician Assistants by the Licensure Board.

It was noted that final registration at the 1985 Annual Meeting was 1,812, and that the theme "The Aging Patient" had been selected for the 1986 Annual Meeting to be held September 21-25, at the Ramada Inn East/Bluegrass Convention Center in Louisville.

The date of the next meeting was set for April 9-10, 1986.

Third Meeting, April 9-10, 1986

The KMA Board of Trustees met in regular session on April 9-10, 1986, in the KMA Headquarters Building.

The President, President of the Auxiliary, Secretary-Treasurer, and Senior Delegate to the AMA gave reports, as did representatives of the Kentucky Board of Medical Licensure and the Kentucky Peer Review Organization.

It was reported that KMA Physicians Financial Services, a Federal Credit Union, had merged with Kentucky TELCO on April 1, 1986, and that the sale of Kentucky Medical Management & Computer Operations would be finalized later in the month.

The Board members selected nominees for Governor-appointed boards, appointed three physicians to the KEMPAC Board of Directors and directed that the Class B Common Stock owned by KMA be voted at the annual meeting of KMIC Stockholders for nine directors.

The Chairman of the Committee on State Legislative Activities outlined the legislation KMA had followed during the 1986 Kentucky General Assembly. The Board members directed the Executive Committee to develop a plan of action to deal with tort reform for consideration by the 1986 House of Delegates and to consider holding an open session on liability insurance during the 1986 Annual Meeting.

The Board members reviewed and adopted the 1985-86 KMA Budget and heard reports of the Committee on National Legislative Activities, KPC Operating Committee, Committee on Medical Insurance and Prepayment Plans, and Membership Committee.

The next Board Meeting was scheduled for August 6-7, 1986.

Fourth Meeting, August 6-7, 1986

The fourth regular session of the KMA Board of Trustees was held on August 6 and 7, 1986. Customary reports were given by the President, Secretary-Treasurer, Auxiliary President, Senior Delegate to the AMA, Commissioner for Health Services, and the Vice President of the Board of Medical Licensure.

The Board members authorized the AMA Delegation to join the Southeastern Coalition and voted to contribute $1,000 to the AMA Health Policy Agenda implementation effort. The Board appointed Martha Keeney Heyburn, M.D., Louisville, to the Editorial Board and selected William T. Watkins, M.D., Somerset, to serve on the Medical Assistance Advisory Council to replace Robert N. McLeod, M.D., Somerset, who had retired.

The Board directed that recommendations of the Executive Committee concerning the CME Committee be implemented: to submit $200 annual dues to the Accreditation Council on Continuing Medical Education; to request that a review be performed to determine KMA's status to act as a provider of CME programs; and to pay expenses for a CME Committee member to attend the ACCME's national conference.

The Board heard reports from the Chairman of the Committee on Maternal and Child Health, and from a member of the Committee on Community and Rural Health concerning problems with the delivery of maternal care in rural areas and the high incidence of low birth weight babies being delivered at primary care hospitals rather than tertiary care centers. The Board was advised that the committees would continue to work with the Department for Social Services to seek solutions to these problems.

The Board members suggested amendments to proposed Physician Assistant regulations and to Organ Transplant regulations and endorsed an effort by the Kentucky Hospital Association regarding dual licensure of hospital beds.

All committee reports were reviewed before their submission to the House of Delegates, and final plans for the 1986 Annual Meeting were discussed.

The next meeting was scheduled for Sunday, September 21, at the Ramada Inn East in Louisville.

Executive Committee

The Executive Committee, which conducts the business of the Association on a day-to-day basis, held nine meetings this year. These are extremely hard-working physicians who give up a significant amount of time for the profession in Kentucky. They are elected by the Board of Trustees and they deserve much praise.

Four of the Executive Committee members serve as the Quick Action Committee. This group meets frequently (almost weekly when the Kentucky General Assembly is in session) to make decisions of an urgent nature. Serving with the Chairman of the Board are the President, President-Elect and Secretary-Treasurer.

Ad Hoc Committees

The Board appointed two Ad Hoc Committees this year, the Ad Hoc Committee on Professional Liability Insurance and the Ad Hoc Committee on Psychiatric Services. The report of the Ad Hoc Committee on PLI, and the proposed Professional Liability Insurance campaign, is being presented to you as Resolution F and its attachments. It is to be acted upon by Reference Committee No. 3.

The Ad Hoc Committee on Psychiatric Services was appointed to do an indepth review of the utilization of psychiatric services under the KMA Blue Cross and Blue Shield Group Health Plan. The Ad Hoc Committee met twice and reviewed 24 cases.

The Board appreciated the efforts of Chairman Warren Cox, M.D., and other members of the Ad Hoc Committee which was composed of psychiatrists and members of the KMA Claims and Utilization Review Committee. Its findings are noted in the Report of the Committee on Insurance and Prepayment Plans.

Once again, I want to thank each member of the KMA staff and all of my colleagues who have assisted and supported me this year.

Nelson B. Rue, M.D.
Chairman

Report of the Secretary-Treasurer

It is pleasing to report another active and productive year for your Association in a number of areas. I am privileged to have been allowed to take part in many of these activities and can assure you of the vigor of our professional organization.

Fiscally, the Association retains a strong position, even though interest income has provided a relatively low yield. Dues income has increased, thanks in part to the effective recruitment and retention efforts of our Membership Committee and staff, but maintenance of our many necessary activities will require additional income in the coming years. I would direct your attention to the Auditor's Report and would urge any questions you might have concerning this material.

The liability insurance crisis is known to all, as it has become a specter in our individual professional lives. KMA has faced a no less difficult situation in trying to retain corporate liability insurance and has encountered the same availability and premium cost issues that many individuals know so well.

It is a constant source of gratification to view the many efforts and activities that are ongoing in the Association. From an external observation, it would seem that legislative and public representation are the Association's major areas of endeavor, and KMA is effective in these areas. However, I would sincerely urge your review of all Final Reports and Resolutions. These provide some indication of the many hours and all of the effort expended in confronting the challenges and issues that face the medical profession. Please pay particular note to the Report of the Committee to Investigate Changing Trends in Medicine. This Report reflects on and considers many of the emerging aspects of the changing medical environment with which we and those who follow us must contend.

Finally, your attention is directed to Resolution F, which is being sent to you as a separate packet of materials. This packet contains information relating to a program developed to address the professional liability insurance problem, which includes a proposal for a dues increase. Revenue from this dues increase would be channeled solely for liability insurance efforts, and the entire packet deserves your close attention.

As another year ends, I would like to offer my humble and sincere thanks for the confidence you have displayed in allowing me to serve as Secretary-Treasurer. I would also like to thank the members of all of the KMA committees, the Board of Trustees, and Officers of the Association for their tireless work and unswerving support for the goals of KMA.

S. Randolph Scheen, M.D.
Secretary-Treasurer

Report of the Editor

This is the 84th year of publication for the *Journal of KMA* and while issues and format may change, the goal remains to provide a link of communication between the Association and its members.

The Editors continue to meet once a month at 7:15 a.m. to discuss scientific articles submitted for review. It is encouraging to point out that articles published throughout the year include topics from numerous medical specialties. This allows the *Journal* to be a diverse publication appealing to all of its membership and a means to provide opportunity for all physicians to share their clinical experience with others.

Continuing along this line, it is equally important to focus on new issues confronting the profession. Articles concerning the liability insurance crisis, practice management and alternate delivery systems have been published throughout the year. Information on these continuously changing issues will be covered throughout the next year.

Each day a barrage of mail crosses physicians' desks, each piece demanding attention. While striving to achieve editorial excellence on the printed page, we hope we have caught your attention with the use of original color art on the covers highlighting inside features. Both color and black and white photographs are being used inside the *Journal* to highlight Board meetings and committee meetings. Besides being a tool for continuing education, the *Journal's* role is to bring increased awareness of membership activities and the work accomplished by individual members.

The Editor will be representing our Editorial Board at the State Medical Journal Advertising Bureau (SMJAB) biennial conference this fall. The two-day event consists of workshops, lectures and critique of our *Journal* which in the past has been useful in incorporating improvements to the format.

On a more personal note, it was with regret that the Editorial Board accepted the resignation of G. Randolph Schrodt, M.D. As Assistant Editor since 1974, his work and contributions to the *Journal* were invaluable and his presence will be missed.

We are pleased to welcome Martha Keeney Heyburn, M.D., a Louisville ophthalmologist, to the Board as Assistant Editor. Doctor Heyburn is a 1980 graduate of the University of Louisville School of Medicine and has been an active member in the Kentucky Society of Eye Physicians and Surgeons.

At this point I would like to personally thank the other editors on the Board: Paul C. Grider, Jr., M.D., Scientific Editor; Stephen Z. Smith, M.D., Assistant Scientific Editor; and Assistant Editors McHenry S. Brewer, M.D., Milton F. Miller, M.D., and David L. Stewart, M.D. It is a privilege to work with each of them.

While thanks are being given, the University of Kentucky and University of Louisville Medical Schools continue to contribute to the Grand Rounds section of the *Journal*. Both schools are to be commended for their effort.

We continue to solicit articles and ideas from every member of KMA through original contributions and Letters to the Editor. The *Journal* is a viable segment of our Association. We feel strongly that it represents an object of great value to each KMA member.

A. Evan Overstreet, M.D.
Editor

Report of the Delegates to AMA

The Kentucky Medical Association Delegation to the American Medical Association has met on three separate occasions this year, as well as attending both the Interim AMA Meeting in December and the Annual Meeting in June. In addition to representation on AMA issues, the Delegates have been faced with increased administrative concerns relating to caucusing on issues with other groups and consideration of the qualities of candidates running for AMA office.

In this regard, and with the approval of the Board of Trustees, the Delegates have joined what is called the Southeastern Coalition, a group of Delegates representing some 13 southeastern states. This was done in an effort to facilitate consideration of administrative issues during AMA meetings.

At the Interim Meeting in December, held in Washington, D.C., a position opposing tobacco advertising was confirmed and strengthened, and called for: a ban on all magazine, newspaper, and billboard advertising of tobacco products; increased participation by physicians in educating the public; improved publicity about the adverse effects of smokeless tobacco; and more promotional health warnings on tobacco packaging.

The AMA budget for 1986 of $139.5 million was approved, as were budgeting allocations for measures to: preserve high standards of quality care; help physicians to respond to changing practice environments; strengthen relationships within the medical community; revitalize membership growth; and enhance activities relating to medical practice concerns.

Professional liability insurance was an ongoing concern, and one report noted that 14½% to 17½% of the $75.4 billion spent on physician services in 1984 were costs generated by the liability system. It was estimated that $17.5 billion of medical costs was due to the practice of defensive medicine, and a special task force on

liability problems was charged with seeking solutions to the liability problems and making this the highest priority of the Association.

Massachusetts state law now requires Medicare participation as a condition of licensure, and the House voted to join in a suit with the Massachusetts Medical Society to oppose this law.

In other activities, the House developed a position on funding of graduate medical education calling for all payors of patient-care costs to bear a portion of this financial burden; voted to oppose any concept of drug substitution without the prescribing physician's authorization; and reaffirmed its opposition to professional boxing.

At the Annual Meeting in June, the House elected William S. Hotchkiss, M.D., of Virginia as President-Elect, and heard President Harrison L. Rogers, M.D., of Georgia call on physicians to continue to have as a primary concern quality of patient care, and to contribute both time and talent to the betterment of the medical community.

A Young Physicians Section was started. The Section will represent physicians 40 years and under and will be allowed one voting Delegate in the House. As part of this effort, the AMA encouraged all states to start similar sections.

A lengthy report on physician manpower was adopted, which noted a continuing physician maldistribution problem, as well as the inadequacy of some foreign medical schools.

A major issue was adoption of a plan for financing health care for the elderly which was suggested to replace the current Medicare Program. This Program, which has since been recommended to Congress, would be prefunded; would provide comprehensive protection, including catastrophic coverage; would have different levels of coverage based on patient ability to pay; and would assure choice among competing health plans.

On the issue of competition and a changing practice environment, the AMA intends to initiate activities to help analyze emerging delivery and financing systems; provide contract assistance services; and, through teleconferencing, provide local physician groups with information on practice development, socioeconomics and risk management.

Approval was given to develop another anti-advertising campaign directed against alcohol, which would attempt to eliminate ads aimed at youth and television program content depicting irresponsible use of alcohol without adverse consequences; would seek the addition of warning labels on beverage containers; and would request labeling information relating to ingredients in alcohol, such as preservatives and ethanol content.

In continuing discussions on liability issues, the special task force gave information on alternatives to tort reform and the activities of coalitions, and called for increased activities by all states in risk management, peer review, and discipline initiatives.

The preceding has been a highlight of the AMA House activities and does not begin to go into any depth about any of the issues discussed. Your Delegates to the AMA are available and would urge any comments or questions you might have about these activities. As Chairman of the Delegation, I would like to personally thank each of its members for their long and tireless efforts in representing KMA. I would urge you to likewise express your appreciation and seek out your representatives for discussions.

My thanks go to Delegates Harold D. Haller, Sr., M.D.; Donald C. Barton, M.D.; and Russell L. Travis, M.D.; and Alternate Delegates Wally O. Montgomery, M.D.; Kenneth P. Crawford, M.D.; Harold L. Bushey, M.D.; and Carl Cooper, Jr., M.D.

Fred C. Rainey, M.D.
Chairman, AMA Delegation

Addendum to Report of the Delegates to AMA

Discussion of two Resolutions was inadvertently omitted from the basic report. Both of these Resolutions were referred from KMA.

The first, Resolution J, was adopted by the KMA House of Delegates in September 1985. Submitted by the Campbell-Kenton County Medical Society, it called for support of the concept that a physician is entitled to charge a payor a commensurate fee for professional and administrative services in fulfilling special insurance program requirements. This position was adopted because some payors required services which exceed "incidental" efforts on the part of the physician.

Because this posed a change to the *Current Opinions of the Judicial Council* of the AMA, the Resolution further called for referral to the AMA House of Delegates. This was submitted by the Kentucky Delegation at the AMA Interim Meeting in December 1986 and was subsequently referred to the Council on Ethical and Judicial Affairs and the Council on Medical Service for review and recommendations.

At the AMA Annual Meeting in June 1986 the Council on Judicial and Ethical Affairs reported that com-

pensation was appropriate when physicians performed "extensive or complex" administrative services. The Council on Medical Services reported that physicians should perform routine services without charge, but that compensation was appropriate when "inordinate amounts of time or effort are involved" in carrying out payor services.

The House of Delegates did not accept the Report of the Council on Ethical and Judicial Affairs and amended the Report of the Council on Medical Services. The standing AMA policy, initiated by Kentucky, reads as follows:

> The attending physician should perform without charge simple administrative services required to enable the patient to receive his benefits. When more complex administrative services are required by third parties, such as obtaining preadmission certification, second opinions on elective surgery, certification for extended length of stay and other authorizations as a condition of payor coverage, it is the right of the physician to be recompensed for his incurred administrative costs.

The second Resolution submitted by Kentucky emanated from studies of the KMA Committee on Medical Insurance and Prepayment Plans. It called for AMA to seek the cooperation nationally of the major medical insurors to provide information on mandated insurance procedures to physicians and hospitals. Such procedures include preadmission certification, outpatient surgery, and second opinions.

The Kentucky Resolution was submitted at the AMA Annual Meeting in June 1986. Because this issue was the subject of a report of the Council on Medical Service which discussed the matter extensively, the Kentucky Delegation agreed to withdraw its Resolution. However, the intent of the Kentucky Resolution was adopted by the AMA House of Delegates.

Both these Resolutions and activities surrounding them are what we hope are examples of the positive representation of KMA members at the national level.

Fred C. Rainey, M.D.
Chairman, Kentucky Delegation

Report of the Executive Vice President

"This past year, perhaps more than any before, has been one of anxiety, anguish, and frustrating experiences. The 'sleeper' that raged like a bad nightmare was the liability insurance crisis that hit us at the start of 19 . . . "

Little did I know when I wrote the above in my final report to you in 1975 that we would once again be faced with a similar problem just 11 years later. Following the difficulties we encountered with the Legislature and the courts in the mid-1970s, KMA established the Kentucky Medical Insurance Company, expecting a captive insurance company to resolve most of our concerns. The "availability" problem which most physicians assumed would be behind us with the establishment of KMIC is beginning to surface as other insurers withdraw from the market. Nevertheless, KMIC is the bridge in the gap and the only force remaining that prevents a total collapse of the professional liability market in Kentucky. Unfortunately, we have no control over the reinsurance market and the other events that have occurred which adversely affect premiums and somewhat offset the progress we made.

Your officers, committees, KMA key contacts, and staff made a determined effort to obtain legislative relief. In the 1986 Kentucky General Assembly, as noted in other reports, House Leadership halted medicine's efforts, along with all other reform measures which would have somewhat alleviated the liability crisis. I can't adequately describe the frustration of KMA officers and staff as we wrestled on a day-by-day basis with the Legislature during the Kentucky General Assembly. We contemplated numerous options that had been tried in other states to focus attention on the liability issue. We restrained our desire to implement "attention getters" such as a "march on Frankfort" because we had hope, through most of the session, that the Legislature would undertake measures to deal with the liability insurance problem. KMA's measure calling for an amendment to Kentucky's Constitution passed the Senate, and it was late in the session before it became clear that the House Leadership would exert its influence on how the issue would be addressed. We very reluctantly resigned ourselves to the fact that House Leadership had simply taken away most of our options (and those of others seeking relief) with the introduction of legislation calling for the establishment of a task force to study the liability problem, with the requirement that it report to the 1988 Legislature.

As you are aware, the KMA Ad Hoc Committee on Professional Liability Insurance has proposed a carefully organized plan of action to be presented to the 1986 House of Delegates, which is dependent upon the support of every physician in Kentucky if it is to be successful. Please read the report carefully and be prepared to discuss its content and vote on its merits.

Many legislative proposals introduced or supported by KMA were adopted. We had attempted to pass several of those measures for numerous sessions of the General Assembly, including the Board of Medical Licensure's proposals, Definition of Death, and the Physician Assistant legislation. For many of our members and to the public at large, the 1986 Legislative Session produced some excellent medical legislation. KMA's position prevailed in 37 of the 44 key bills in which we were involved.

Having given KMA a total commitment for many years, Doctor Carl Cooper is retiring from his role as Chairman of the Committee on State Legislative Activities for the past 10 years. Words won't come for me to express my personal feelings and those from my role as your Executive Vice President to this gentleman who has gone through so much with us, provided outstanding counsel, and was a steadying influence. There is ongoing turmoil in working with the General Assembly. His guidance was ever present. Thank you, Doctor Cooper.

Membership

Although the professional liability problem has taken its toll on our activities, we have had a super year otherwise. Our Membership Committee, under Doctor Harold Haller with excellent staff assistance, provides much promise. We have an all-time record high in membership. We see a reawakening of the profession and strong efforts will continue, especially for those physicians under 40 who appear to demand more attention in preparation for joining the Association. Please read the Membership Committee's Report carefully, for it reflects numerous individuals' efforts, including several of our Alternate Trustees who went beyond the call of duty.

General Activities and Changes

Our committee structure has worked well this year, and the excellent reports which you received are indicative of their labor and interest in the well-being of the profession. As noted in other reports, KMCO and KMA Physicians Financial Services, Inc., A Federal Credit Union, are no longer entities of KMA. In addition, the Board of Medical Licensure has relocated from our building. The regrouping and restructuring that has taken place hopefully permits us to concentrate on major medical issues, especially the liability insurance problem. In addition, both the computer company and the credit union have significant capital behind them which should permit them to better serve the medical community.

Finances

Financially, this Association remains on a sound basis. This past year's operating income and expenses were approximately $150.000 better than anticipated. This helped maintain a strong Reserve Fund of approximately a one year's operating budget, as is Association policy. Total staff awareness of our cost-conscious and cost-cutting policies continues to bring about appropriate results. We are in the third year of a five-year dues plan, and no increase for general operating funds should be needed for at least those five years.

Staff

The staff level of KMA remains at or less than the number of employees of approximately 10 years ago, although our function and activities have increased dramatically. Our staff is one of the most experienced in the U. S. with an **average** of 15 years of service per executive staff member and eight years of service overall, with a total of 212 KMA staff years. Our attrition rate is very low and staff morale remains high, despite the pressures brought on by the increasing duties required. To each staff member, I express my true gratitude for their outstanding efforts each and every day.

Closing Thoughts

Two years ago, the cost of medical care was the predominant theme. Last year, cost of care criticism seemed to subside as the liability insurance crisis issue reared its ugly head. However, we see strong signs that the health costs issue appears to be rising again. We are seeing a restructuring of the way medical services are contracted and paid for. The distinction between hospitals and insurors is blurring. Medicine, traditionally based on understanding and trust between physician and patient, is now big business. Employers are beginning to assume the same posture as government, thereby demanding that they play a greater role in deciding how, when, and where care is delivered and how much they will pay for services. Medicine must find ways to respond to this situation to assure that the patient is given the highest quality of care available, and the employer recognizes that his employees are receiving maximum value for the premium dollar.

The problem of indigent care and reimbursement to medical providers for indigent care continues to expand and may reach dramatic proportions in the next year or

so. The "Robin Hood" concept of cost shifting, in which everyone shared a proportionate responsibility for indigent care, has now largely been removed. Employers negotiate and pay only for services rendered to their subscribers and insureds. Those who are unfortunate enough to be poor, such as the very young or very old, are often ineligible for governmental programs and are unaware or are unable to obtain the care they desperately need. The Kentucky Physicians Care Program was recently recognized with a Citation from President Reagan, and has done a remarkable job in Kentucky in filling that void. The 2,250 participating physicians have done an outstanding job. They are the unsung heroes who have accepted a tremendous responsibility in the true tradition of Kentucky medicine.

The effects of the Reagan revolution, Gramm-Rudman-Hollings, and other Federal initiatives, have brought increasing pressures upon the states. The Feds have taken away funds and expected the states to fill the void. As a result, we see only increasing cuts in indigent and child care programs. The emerging problem of maternal and child health, in rural areas particularly, (noted in other Final Reports) is a major result. As Federal funding cuts, DRGs, and malpractice problems continue unabated, access to needed services by the poor will only deteriorate as time goes by. Unfortunately, we may find ourselves competing with hospitals, nursing homes, and other allied groups over the funds that are available.

Special praise should go to your 1985-86 President, Wally O. Montgomery, M.D. Doctor Montgomery has displayed outstanding leadership and has gone the extra mile. I think it is significant that all 15 Trustees conducted an annual meeting. Through these meetings, each District has been given the opportunity to discuss the liability crisis, and to review legislative activities and other functions of KMA. When you combine these activities and bear in mind that the starting point for every meeting was Paducah, you begin to understand the unbelievable commitment Doctor Montgomery has made during this year.

Doctor Nelson Rue served his second consecutive year as Chairman of the Board of Trustees and has conducted himself in the highest tradition. He has made certain that every person and every side of every issue was heard. During the Legislative Session, no one was more frustrated and enraged than Doctor Rue over the Legislative Leadership's obstinance in refusing to permit our legislative package to be passed. Members of the Board of Trustees were very diligent in their duties and are to be commended for sacrificing their time and providing KMA with exceptional leadership.

Allow me to close by thanking each and every KMA member for their commitment to the profession and to their patients. On behalf of the staff, we appreciate the opportunity to be of service to physicians. We look forward to trying to resolve many of the problems you face on a day-to-day basis. We know there is much to be done and hope that you will call us when you feel we can be of assistance.

Robert G. Cox
Executive Vice President

Report of the Advisory Committee to AKMA

The Advisory Committee to the KMA Auxiliary was established by the Board of Trustees to assist the Auxiliary in its communication with the KMA membership and Board of Trustees. At each Board meeting, the President of AKMA presents an update on the activities of the Auxiliary and the projects it is carrying out. A major effort is made every year to raise funds by the Auxiliary for the AMA-ERF. The 1985-86 Associational year was a banner year for AKMA and numerous awards were presented to Kentucky at the Annual Meeting of the Auxiliary to the American Medical Association.

The Boyd County Medical Society Auxiliary received an achievement award from the AMA Education and Research Foundation for having the largest per capita contribution in the U.S. It was first among the 950 county auxiliaries in the U.S. Congratulations go to Mrs. Lamar (Eloise) Meigs, AMA-ERF Boyd County Chairperson, who led her chapter to a winning per capita giving of $181.10.

The KMA Auxiliary also received an achievement award for having more than a 25% increase in AMA-ERF contributions in 1985-86. The total for the year was $41,907.03, an increase of $8,654.37. In addition, AKMA was recognized for having 100% participation in contributions from all component auxiliaries in Kentucky. Mrs. Larry (Carol) Franks of Paducah was 1985-86 State AMA-ERF Chairman. Mrs. Arthur (Jo-Ann) Daus of Louisville, Immediate Past President of AKMA, was named to the National AMA-ERF Committee.

During the past year, the Auxiliary has continued its assistance to the McDowell House which is owned by the KMA. The various projects carried out in the local communities and the funds raised which are later pre-

sented to the McDowell House have been crucial to its survival.

I have only briefly touched on the AKMA activities and refer you to the AKMA President's Report for a complete update on an outstanding year. Special praise should go to Mrs. Arthur (Jo-Ann) Daus, 1985-86 President of the AKMA, who gave so unselfishly of her time and energies to assist KMA in the initial McDowell/Crawford Ball which raised over $5,000 for the McDowell House. It is quite clear that the Auxiliary had an outstanding year, and on behalf of the members of the Advisory Council and the Board of Trustees, we commend the Auxiliary for its dedication and service. Congratulations go to Mrs. John (Phyllis) Cronin of Lexington, 1986-87 President, and we wish for her a very successful year.

Charles C. Smith, M.D.
Chairman

Report of KMA Physicians Services, Inc.

KMA Physicians Services, Inc., a wholly-owned subsidiary of the Kentucky Medical Association, is served by a Board of Directors composed of the members of the KMA Executive Committee.

The Board of Directors of KMA Physicians Services, Inc. met twice in person, and several times via conference call, during the 1985-86 Associational year. The major item of business was to finalize details of the sale of Kentucky Medical Management & Computer Operations to the Community Mutual Insurance Company of Ohio (CMIC). It was noted in last year's holding company report that 80% of KMCO had been merged with Physicians Administrative Corporation of Ohio (PACO), with KMA Physicians Services retaining 20% ownership. Subsequently, CMIC expressed an interest in acquiring 100% of KMCO, and on June 13, 1986, our 20% stock was transferred, and the KMCO Board of Directors was dissolved. Soon thereafter, PACO relinquished its majority ownership to CMIC.

KMCO staff is planning to move from the KMA Headquarters Building soon to allow space for growth of the KMA Insurance Agency.

Report of the KMA Insurance Agency, Inc.

The Kentucky Medical Association organized the KMA Insurance Agency, Inc. at its Annual Meeting in September 1978. The Agency was founded to fulfill the goal of providing a marketplace for the professional liability insurance protection needs of Kentucky physicians until the Kentucky Medical Insurance Company was capitalized. The Agency then branched out into other personal lines of insurance.

During 1985, the Agency continued to offer personal insurance products and services created to meet the special needs of physicians. Individual insurance policies for homeowners, automobiles, office protection and disability income, as well as umbrella policies for extended coverage, are available through the Agency. Varied life insurance plans including Universal Life Policy, group term and other individual insurance products are also available through the Agency.

Kentucky physicians are assisted in assessing and meeting their insurance needs by agents Janet Bates, Mary Douthitt, Dave Jaggers, and Tim Doyle who assumed the position of Assistant Agency Manager this year. These agents along with Bob Proffitt, Manager, Sales and Marketing for KMIC's professional liability insurance, provide access to other professional representatives who can handle physicians' special insurance requirements.

Affiliate agents strategically located throughout the state have been selected by the Agency to provide the Kentucky Medical Association membership with life insurance planning services which are sponsored and approved by KMA. These affiliates further ensure the Agency's commitment to provide Kentucky physicians with the best possible service with a personal touch. The Agency deals with American Physicians Life for life insurance programs designed exclusively for physicians.

The Agency has modified its services during the past year. It has become the agent of record for the KMA's groups health insurance plan through Blue Cross and Blue Shield. Tom Elder, who joined the Agency staff this year, serves as administrator of this plan. He is also in charge of the Agency's other lines of life and health products.

In 1985, the Agency continued to grow with approximately $625,000 in premiums as compared to $298,000 in 1984 for an increase of 110%. As a result of this expansion, the Agency added three employees to its staff that now includes four in-house professionals who handle the day-to-day tasks of issuing and maintaining policies.

The Agency's success and growth during the last year owes much to the interest and continued support of Kentucky physicians. Under the guidance of Robert G. Cox, Executive Vice President of KMA, serving as

President; and Morton C. Bell, Executive Vice President: the Agency will continue to provide quality products and service to Kentucky physicians by helping them meet their special insurance needs.

Dwight L. Blackburn, M.D.
Chairman

In concluding the KMA Physicians Services report, I would like to thank the KMA Insurance Agency Board of Directors and its staff for its excellent work. I also appreciate the time and effort devoted by the Board of KMA Physicians Services, Inc. this past year.

Nelson B. Rue, M.D.
Chairman

Report of Kentucky Medical Insurance Company

The Kentucky Medical Insurance Company completed its seventh year of operation on June 1, 1986, with over 2,200 insureds, representing approximately 50% of the total physician liability market in Kentucky. With over $18 million in assets, KMIC's total premiums written in 1986 are projected to be about $12 million.

At a special meeting held on January 30, 1986, the KMIC Board of Directors decided that, effective April 1, 1986, KMIC would offer its Modified Claims Made Policy exclusively. KMIC is unable to offer the Occurrence Policy because quality reinsurance is not available for that type of policy. In fact, reinsurance is difficult to obtain at this time for any type of professional liability insurance. New rates that became effective April 1, 1986, were adopted at that same Board meeting. The developments of the special meeting were communicated to all KMIC policyholders in a mailing on February 10, 1986.

As far as its excess reinsurance is concerned, KMIC entered a new era on April 1, 1986. Beginning on that date, any policies sold by KMIC with limits above $200,000/$600,000 will be reinsured for that excess under a three-year contract with Lloyd's of London. Major changes in the liability reinsurance market and the increasing cost of reinsurance necessitated this change of reinsurers.

We are pleased in these turbulent times to be able to participate in a stable reinsurance market such as Lloyd's. We believe that our ability to negotiate such an agreement reflects positively on the management of KMIC to date and ensures a more stable outlook for the future.

The Annual Meeting of Stockholders of KMIC was held on April 24, 1986. All of the Company's Directors were reelected to the Board by shareholders' vote.

As of July 1, 1986, KMIC began offering new coverage limits of $1/2 million, $2/4 million, $3/5 million, $4/6 million and $5/7 million, which benefit our policyholders by increasing available aggregate coverage.

The simultaneous increases in premiums written and the frequency and severity of claims have created the need for additions to the Company's professional staff. New employees joined us in the claims, accounting, sales and service, and data processing areas. James A. Baumgarten, M.D., a former member of the KMIC Board of Directors, also joined our staff to head our Claims Awareness Program and lend his professional experience to our Claims Department.

Despite the negative impact of increased claims on professional liability premiums, KMIC continues to provide available and sound coverage while committing itself to deal directly with reducing claims and their costs. The Company also strives to hold down the costs and losses associated with medical malpractice through its Claims Awareness Program and statewide program to monitor and reduce legal defense costs without jeopardizing the quality of defense.

As KMIC looks to the future, we pledge to maintain our tradition of excellent service, financial strength, and quality products. We will also strive to continue to merit the confidence of Kentucky physicians who have supported KMIC since the Company's formation.

Detailed reports on KMIC's activities, claims experience, investigation of alternative dispute resolutions, and other aspects of the Company's operations will be available to the House of Delegates during the Annual Meeting of the KMA.

Ballard W. Cassady, M.D.
Chairman

END OF CONSENT CALENDAR ITEMS

Report of the President

This has been a rewarding year for me as your President. It was a distinct pleasure to have been in 14 of the 15 Trustee Districts as your guest and to present my views regarding our legislative efforts. I thank you for your gracious hospitality and the sharing of your ideas and concerns. Also, I have represented you at four other state annual meetings in Virginia, Indiana, Ohio, and West Virginia, as well as at the AMA Interim and Annual Meetings.

Perhaps the number one problem we faced this year

involved the activities of the Kentucky General Assembly and efforts to get some meaningful legislative relief for our liability crisis. Carl Cooper, M.D., Chairman of the Committee on State Legislative Activities, is to be congratulated on his efforts.

With the efforts of staff and many others, testimony was presented on many occasions. The only concession we got was HJR 139, which created a task force established by the House of Representatives to investigate the insurance industry and related problems. Richard F. Hench, M.D., President-Elect of KMA, and Carl Wedekind, President of the Kentucky Medical Insurance Company, are on that Task Force and will be representing the views of Kentucky physicians.

During this session of the House of Delegates, many recommendations will be coming to you from the Ad Hoc Committee on Professional Liability Insurance which will reaffirm our desires regarding the liability issue. I ask you to look at these with a positive attitude.

A significant part of our long-range legislative efforts will be the coalition now being put together with other business and professional groups. This Tort Reform Association of Kentucky (TRAK) will be dependent on KMA's leadership to get funds and keep active. Forty other states now have such coalitions, along with the American Tort Reform Association initiated by the AMA.

KEMPAC remains an important part of any political hopes for KMA. Support this bipartisan organization, whose funds are used only for candidate support. It becomes more significant each election cycle to support those who may listen to our views and vote for bills we may need to have passed.

Through our Committee on National Legislative Activities, we are monitoring about 10 bills in Congress which may give some support for tort reform. Although most of these relate to product liability, I believe it is crucial to support any type of reform which may eventually help us.

1986 has also seen the merger of the KMA Physicians Financial Services, a Federal Credit Union, with Kentucky Telco, forming a much more viable and effective financial institution. Bob Cox should be commended for all of the hours of "blood, sweat, and tears" in getting this accomplished, as well as the successful transfer of our computer company to Community Mutual Insurance Company of Ohio.

The Private Sector Initiatives Citation received by KMA for the Kentucky Physicians Care program was significant, in my view. Continuation of this program is one sure way to get public recognition and enhance our legislative efforts on indigent care issues.

KMA has been positive in establishing the Hospital Medical Staff Section, Resident Physicians Section, and Medical Student Section. I hope each of you will get involved with these activities and support their efforts, which are vital to us all and to the future membership of our Association.

Now I feel compelled to mention some concerns which KMA leadership and the House of Delegates will need to be closely observing:

1. Health Policy Agenda — to be made available by the AMA during the coming year. I believe the trend and recommendations made will need close scrutiny, and I feel sure there will be controversial issues on which we will have to take a stand.

2. Resource-Based Relative Value Scale — a Harvard project funded by the Health Care Financing Administration with contracts awarded to the AMA for assistance in development. In my opinion, this project will be most divisive to physicians, and it must be approached carefully and thoughtfully. In this time when unity in the profession is so important, we must not allow disruption.

3. Medicare Reimbursement — is a perennial problem and must be watched with caution. It will take many turns and, with our national economic situation, physicians will surely get less reimbursement.

4. Funding of Graduate Medical Education — For the future of our profession and the health care of this nation, we must be involved with and support medical education. Surely, Federal and probably State support will diminish for medical education, but we cannot allow educational quality to subside.

5. Relations with Paramedical Groups — Optometrists have proven they want more involvement and will continue to push to have an expanded role in eye care, regardless of their level of training. Chiropractors will do the same, as well as nurses and others. On both the national and state levels, we must continue to be wary of attempts by nonphysician groups to practice medicine.

As I complete my year at the helm of KMA, there are many tributes to others which I want to give. The Auxiliary, headed by Jo-Ann Daus and Phyllis Cronin, has been a bright spot in the medical family. Its activities for better health are never to be minimized.

The Board of Trustees, Alternate Trustees, AMA Delegation, and KMA committee members are to be thanked. Nelson Rue, M.D., as Board Chairman, has

been very supportive of each of your concerns and is of tremendous value. Don Barton, M.D., has consistently worked for you as Vice President. Randy Scheen, M.D., over the past many years as Secretary-Treasurer and member of many committees, has probably given more hours of service to Kentucky doctors than any other physician.

The 1986-87 Associational year will have Richard Hench, M.D., as your President. Dick has all the qualities of an excellent leader, and I thank you for electing him to this position. He will serve you well and I promise him my support.

KMA is blessed by the best staff — both executive and support — of any medical association in this nation. Bob Cox, Bill Applegate, Bob Klinglesmith, Don Chasteen, Bill Doll, and Lillie Byrd are without peer. They have constantly been available for information and support to me this year, and the *Journal*, secretarial, printing, and other personnel have been wonderful. I thank each one of them.

And I want a final word of thank you to my wife, Gerry, who has believed for so many years that all vacations are KMA meetings. She and our children have my sincere appreciation.

Wally O. Montgomery, M.D.
President

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed the Report of the President. The Committee wishes to thank Doctor Montgomery for his outstanding service to all Kentucky physicians as President of the Kentucky Medical Association. Reference Committee No. 1 recommends that the Report of the President be adopted.

Report of the Kentucky Physicians Care Operating Committee

The Kentucky Physicians Care Operating Committee met four times this year with your Chairman and staff being involved in some aspect of the program on a daily basis throughout the year.

As this report is being written, the Kentucky Physicians Care project is completing its 19th month of operation. During that time, 30,276 individuals have been certified eligible for the program and 12,051 referrals have been made, which we estimate resulted in 48,000 physician encounters. This latter figure is estimated because, in most cases, once a patient is seen by a participating physician, he or she tends to continue seeing that physician and as a result does not continue to call the toll free number.

The Headquarters Office continues to receive telephone inquiries and requests for referral. Over 24,000 calls have been made to the toll free number over the past nineteen months.

The participation and support of the physicians in Kentucky continues to be excellent. The Committee solicited participation on two occasions this year, and 161 physicians joined the program, bringing our current level of participating physicians to 2,252. Thus, more than half of the estimated 4,200 physicians who are actively practicing medicine in Kentucky are participating in Kentucky Physicians Care. The Committee wishes to particularly recognize the continuing support of the primary care physicians who remain the initial contact point for the vast majority of referrals made through the program. The contribution made by these men and women is incalculable, and we are very appreciative of their efforts on behalf of the KPC patients and the medical profession in Kentucky.

The Kentucky Health Care Access Foundation continues as the primary funding source for the program. Funding of the Foundation is largely the personal philanthropy of Brereton Jones of Midway. The Foundation underwrites the cost of the toll free telephone lines, two full-time employees and a third part-time person hired on an as-needed temporary basis. The financial commitment made by the Foundation since the onset of the program through June of 1986 was $109,384.52.

KMA provides space at the Headquarters Office, telephone equipment, supplies, furniture, computer time and equipment, postage and KMA staff involvement as needed. These "in-kind" contributions totalled $67,700 for the period September 1984 through December 1985. Expenses for the first six months of 1986 were $15,500, and we estimate total expenses for 1986 to be in the neighborhood of $30,000.

The Cabinet for Human Resources has been extremely cooperative during the course of this project. Roy Butler and Janie Miller of the CHR staff have given a considerable amount of time and effort to the program, as have the 1,000 field workers in the 120 county CHR offices across the state.

A primary objective of the Operating Committee this year was to work with the Kentucky Pharmacists Association and the Pharmaceutical Manufacturers Association to make prescription medicines available through the program. Several meetings were held in Kentucky and your Chairman met with Pharmaceutical

Manufacturers Association staff in Washington, D.C. on this concept. The manufacturers and pharmacists have been very supportive and efforts have been made to provide additional sample medications to participating physicians.

The Committee was hopeful that the Kentucky General Assembly would enact measures to address the question of health care of the indigent, but unfortunately, that did not occur this session. In 1984, the Kentucky Senate passed a Resolution directing the Legislative Research Commission to conduct a study of the financing of health care for the medically indigent in Kentucky. The Commission held 13 meetings and developed 46 recommendations which were made available to the 1986 Kentucky General Assembly.

In the fall of 1985, Governor Martha Layne Collins appointed a 36 member committee chaired by Brereton Jones, whose charge was to reevaluate the Medicaid program and examine the issue of indigent care. The group met on a number of occasions and held hearings across the state in an effort to identify the problems in the Medicaid program in Kentucky and to offer suggestions and recommendations for change. That Committee's report was also available to the 1986 Kentucky General Assembly.

The legislators considered a number of other proposals dealing with the problem, one of which was the Omnibus Health Care Reform Act which would have placed a 3% tax on insurance premiums to pay for health care of the indigent. Discussed, but not included in the final draft legislation, was a proposal to place a 1% tax on physicians' income. We feel the 1% tax was not put into the final draft largely because KMA's testimony before the Interim Joint Committee on Appropriations & Revenue was able to document the significant contributions physicians were already making through Kentucky Physicians Care. The Omnibus Health Care Reform Act did not pass but did serve to bring the issue before the Legislature. It is anticipated that similar proposals will be introduced during the 1988 session.

The General Assembly called for the appointment of still another group to study the problem of medical indigence and the uninsured, and asked that model legislation be developed to provide access to medical care for the indigent.

This may not seem like much, but one must remember that the mood of the Legislature, the federal government, Congress and the public is for fewer taxes and budget cuts, and not the expansion of social programs which are heavily dependent on tax dollars. The Kentucky Physicians Care program provides the profession with a degree of credibility and documentable data that will be very helpful as the political process to find a solution to this problem unfolds.

In June of this year, Kentucky Physicians Care was selected from over 1,500 voluntary programs nationwide to be recognized by the President's Citation Program for Private Sector Initiatives. KMA was one of 100 organizations honored by President Ronald Reagan at a White House ceremony attended by KMA President, Wally O. Montgomery, M.D.

The President's Citation Program was developed to recognize efforts by the private sector for excellence in community service. The Citation Program began in 1984 to encourage the growth of voluntary services on the part of businesses, trade associations and professional societies by recognizing the outstanding contributions being made.

Earlier this year, your Chairman had the opportunity to share information on KPC with national leaders during the AMA State Health Legislative Meeting in Las Vegas. Also, in December, we were invited to be a participant in the Health Policy Forum and the Intergovernmental Health Policy Project held at George Washington University in Washington, D.C.

During the past year, several inquiries have been made about Kentucky Physicians Care by other state and national medical societies. Our colleagues continue to be impressed by the magnitude of the program in Kentucky and by the cooperative participation of the private and public sectors.

The KPC Operating Committee has again devoted a considerable amount of time and effort to Kentucky Physicians Care this year, and I appreciate the support and participation of the Committee members, the Foundation staff, and CHR representatives in operating the program. Bonnie Taylor, RN, began with the program at its inception, serving as our primary referral staff person. She left earlier this year to pursue other career opportunities. Ms. Taylor did an outstanding job and we were sorry to see her leave. We were pleased to have Barbara Sharp, LPN, join the program as Ms. Taylor's successor last spring, and she has approached her new duties with vigor and enthusiasm. Sharon Hochstetler is associated with the program on a full-time basis and is responsible for maintaining records on clients and participating physicians and other administrative matters, as well as serving as a backup

person for referrals. She is very capable, extremely reliable and dedicated, and we appreciate her efforts on behalf of Kentucky Physicians Care.

The Operating Committee, after much thought and discussion, recommends that KMA continue the Kentucky Physicians Care program through December 31, 1987, contingent on:

1. Program funding being continued, as appropriate, by the Kentucky Health Care Access Foundation, with KMA contributing in-kind services as done in 1985 and 1986;
2. A continuing commitment from the Cabinet for Human Resources to evaluate program applicants for eligibility, as is currently being done;
3. The Kentucky Hospital Association continuing its Fair Share program as currently operated;
4. The Kentucky Health Care Access Foundation continuing to vigorously encourage the active participation of free-standing emergency centers, health maintenance organizations, and all other health care delivery and/or financing organizations in Kentucky Physicians Care or the Fair Share program, as may be appropriate; and
5. The Kentucky Health Care Access Foundation making Kentucky legislators aware of the plight of those ineligible for Medicaid assistance solely because they do not meet the confusing and arbitrary requirements of the Medicaid Program, while working to broaden the societal financial obligation necessary to provide care to those in need of such assistance.

Russell L. Travis, M.D.
Chairman

RECOMMENDATIONS:

1. **The Committee recommends that KMA continue the Kentucky Physicians Care program through December 31, 1987, contingent on:**

   A. Program funding being continued, as appropriate, by the Kentucky Health Care Access Foundation, with KMA contributing in-kind services as done in 1985 and 1986;

   B. A continuing commitment from the Cabinet for Human Resources to evaluate program applicants for eligibility, as is currently being done;

   C. The Kentucky Hospital Association continuing its Fair Share program as currently operated;

   D. The Kentucky Health Care Access Foundation continuing to vigorously encourage the active participation of free-standing emergency centers, health maintenance organizations, and all other health care delivery and/or financing organizations in Kentucky Physicians Care or the Fair Share program, as may be appropriate; and

   E. The Kentucky Health Care Access Foundation making Kentucky legislators aware of the plight of those ineligible for Medicaid assistance solely because they do not meet the confusing and arbitrary requirements of the Medicaid Program, while working to broaden the societal financial obligation necessary to provide care to those in need of such assistance.

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed the Report of the Kentucky Physicians Care Operating Committee. Recommendation No. 1 calls for continued operation of the Kentucky Physicians Care Program through December 1987 with contingencies as noted. The Reference Committee recommends that Recommendation No. 1 of the Report of the Kentucky Physicians Care Program be adopted.

Resolution A
Board of Trustees
Amendment of the Legal Trust Fund

WHEREAS, Resolution Q (1973) established the Legal Trust Fund, which was revised by action of the House of Delegates in 1978, and

WHEREAS, changes are deemed advisable based on recent experience, now therefore be it

RESOLVED, that the seventh paragraph of the Resolution, beginning with the words "having underwritten a cause," be replaced with the following wording, which precedes the existing language, appearing below with slashes.

Having underwritten a cause, the Trustee will continue support from the Trust of all or part of the legal costs during the course of the litigation, if in the opinion of the Trustee the cause continues to promote or protect the broad interests of the medical profession, the legal costs are reasonable and are commensurate with the degree of importance of the cause supported, and the legal costs are within the financial ability of the Fund, taking into consideration the other current or prospective demands upon the Fund.

~~Having underwritten a cause, the Trustee is obligated to continue its support to the highest judicial level possible consistent with the advice of KMA and plaintiff physician's counsel.~~

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed Resolution A — Amendment of the Legal Trust Fund submitted by the Board of Trustees and recommends that it be adopted.

Resolution M
Franklin County Medical Society
Timely Mailing of KMA Delegate's Packet

WHEREAS, many county medical societies meet during the latter half of each month, and

WHEREAS, presently, the KMA Delegate's packet is mailed after September 1 of each year, and

WHEREAS, this does not give many county societies time to consider the issues and properly instruct their Delegates, now therefore be it

RESOLVED, the KMA Headquarters mail future KMA Delegate's packets before August 15 of each year.

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed Resolution M — Timely Mailing of KMA Delegate's Packet. The Committee noted that county medical societies need adequate time to consider the issues and properly instruct their Delegates. However, earlier mailing would not be practical due to the logistics of the operation of the Association. Reference Committee No. 1 offers the following substitute Resolution in lieu of Resolution M:

"RESOLVED, that the KMA notify county medical societies in June of the expected date of mailing of Delegate's Packets, and be it further

RESOLVED, that county medical societies submit to the KMA Headquarters as early as possible the names of Delegates and Resolutions to be considered."

Reference Committee No. 1 recommends that Substitute Resolution M be adopted.

Resolution AA
Fayette County Medical Society
House of Delegates Actions

WHEREAS, each year at meetings of the Kentucky Medical Association House of Delegates Resolutions and recommendations from committees are adopted without follow-up reports at the next House of Delegates meeting, now therefore be it

RESOLVED, that the KMA Board of Trustees provide in the Delegate's packets a summary of actions taken at the previous House of Delegates meeting and a status report on these actions.

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed Resolution AA — House of Delegates Actions submitted by the Fayette County Medical Society and recommends that it be adopted.

Mr. Speaker, I recommend the adoption of the Report of Reference Committee No. 1 as a whole.

Mr. Speaker, I want to thank the members of Reference Committee No. 1: Allen E. Grimes, M.D., Lexington; John M. Johnstone, M.D., Richmond; Deborah L. McIntyre, M.D., Hazard; and J. Michael Pulliam, M.D., Franklin. I would also like to thank Jeanette Thompson for her assistance in preparing this report.

REFERENCE COMMITTEE NO. 1

Robert R. Goodin, M.D., Louisville, Chairman
Allen E. Grimes, M.D., Lexington
John M. Johnstone, M.D., Richmond
Deborah L. McIntyre, M.D., Hazard
J. Michael Pulliam, M.D., Franklin

EDITORIAL NOTE: Unless otherwise indicated, the Reference Committee action on each Report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.

REPORT OF REFERENCE COMMITTEE NO. 2

Donald R. Neel, M.D., Owensboro
Chairman

Reference Committee No. 2 considered the following Reports and Resolutions:

14. Report of the Scientific Program Committee
15. Report of the Scientific Exhibits Committee
16. Report of the Continuing Medical Education Committee
17. Report of the Council on Continuing Medical Education
18. Report of the Cancer Committee
19. Report of the Hospital Committee
20. Report of the Emergency Medical Care Committee
21. Report of the Physician Manpower Committee
22. Report of the Interspecialty Council
23. Report of the KMA Hospital Medical Staff Section
    - Resolution B—Disclosure of Hospital Patient Care Activities (McCracken County Medical Society)
    - Resolution H—Organ Donor Cards (Fayette County Medical Society)

ITEMS FOR CONSENT

Reference Committee No. 2 reviewed the following items and recommends they be filed or adopted as indicated, by the consent of the House, without discussion:

14. Report of the Scientific Program Committee — filed
15. Report of the Scientific Exhibits Committee — filed
17. Report of the Council on Continuing Medical Education — filed
18. Report of the Cancer Committee — filed
19. Report of the Hospital Committee — adopted
20. Report of the Emergency Medical Care Committee — adopted
22. Report of the Interspecialty Council — filed
23. Report of the KMA Hospital Medical Staff Section — filed

Reference Committee No. 2 would like to express its appreciation to the members of these committees and the authors of the reports which have been filed or adopted for their time and effort.

Report of the Scientific Program Committee

"The Aging Patient" was selected by the Scientific Program Committee as the overall theme for the 1986 KMA Annual Meeting Scientific Program. Each morning session will focus on the aging process from the perspective of the various specialties participating in the Meeting. The Committee members and specialty society presidents have gone to great lengths to bring in some of this country's outstanding speakers, and we are hopeful that the membership will find their presentations useful.

This year the entire KMA Annual Meeting will be held at the Ramada Inn/Bluegrass Convention Center in Louisville. The Ramada is an excellent convention facility and allows us to hold the entire Meeting at a single location.

The Scientific Program was planned last fall and a meeting was held in December with the presidents of the 22 specialty groups, which will participate in the Annual Session, to discuss their part in planning the Scientific Program. Specialty group scientific programs held in conjunction with the General Sessions have proven invaluable, and we feel provide an excellent contribution to the continuing medical education of the membership. I personally appreciate the excellent cooperation the Committee has had from the specialty societies in planning the overall Meeting.

This year specialty groups will meet, for the first time, on Wednesday afternoon. The Committee feels this format will be helpful to our out-of-state guest speakers in that their time away from home will be shortened. Also, the Committee feels that we will be able to better utilize the convention facilities to allow more space for specialty meetings and to alleviate some of the problems with parking that attendees have had in the past.

This year's Annual Meeting was again accredited for AMA Category 1 continuing medical education credit and was also approved for CME credit by several specialty societies. We urge the membership to visit the Technical Exhibit area during the course of the Meeting. We feel it is a most worthwhile and meaningful adjunct to the formal Scientific Program and offers members the opportunity to discuss new products and become familiar with new equipment free from the interruptions and distractions of the office or hospital.

I am very grateful for the efforts of those who have assisted in the formation of this program, particularly the Program Committee, specialty group presidents and program chairmen.

Suggestions for future programs are always welcomed by the Scientific Program Committee.

Max A. Crocker, M.D.
Chairman

Report of the Scientific Exhibits Committee

The Scientific Exhibits Committee is pleased to report to the KMA House of Delegates that there were 10 Scientific Exhibits at the 1985 Annual Meeting. The exhibits were educational and informative and attendees had many favorable remarks on the quality of the exhibits. We urge members who have something to offer in terms of new procedures or techniques to consider developing an exhibit for the KMA meeting and sharing it with their peers.

The Committee has maintained the procedures previously utilized to approve exhibit applications. The application is received at the Headquarters Office and then mailed to the members of the Committee. Unless we hear a negative response, we assume approval of the exhibit.

We look forward to continued service to the Association, and if members have suggestions which will improve both quality and numbers of exhibits, we welcome suggestions.

Richard A. Kielar, M.D.
Chairman

Report of the Council on Continuing Medical Education

The Council on Continuing Medical Education was developed in 1983 so KMA could provide and jointly sponsor CME activities separate from the accreditation process. As mentioned in the report of the CME Committee, the Council's direction is undergoing procedural change, and separate and distinct accreditation for provider efforts will be sought.

The procedural changes directed by the Accreditation Council for Continuing Medical Education (ACCME) essentially make the provider and joint sponsor activities more formalized than previously, and will likely result in a clearer separation of the activities of the Committee and the Council.

Routinely, 15-20 requests for cosponsorship are received each year by the Council. If a recommendation for mandatory CME is adopted, it is predicted that the work of the Council will be greatly increased. Pending finalization of communications with the ACCME, the Council has not provided or cosponsored any programs, but hopes to resume these activities in the near future.

James A. Baumgarten, M.D.
Chairman

Report of the Cancer Committee

The KMA Cancer Committee met on two occasions during the 1985-86 Associational year. The Committee's activities centered upon Resolution M, adopted by the 1985 KMA House of Delegates. The House of Delegates directed that the KMA explore all avenues to accomplish deletion of authorship identity from the pamphlet, "Breast Cancer: Treatment Options," as specified in Kentucky Revised Statute 311.935. In addition, the Board of Trustees was requested to refer this issue to the KMA Cancer Committee for further study and recommendations on this and any further patient cancer education programs.

The pamphlet was printed as a result of House Bill 609 which passed as amended in the 1984 Kentucky General Assembly. The legislation directed that a booklet be written by two cancer centers, the McDowell Cancer Network and the James Graham Brown Cancer Center, and printed and distributed by the Cabinet for Human Resources.

Gilbert H. Friedell, M.D., Executive Director of the McDowell Cancer Network and Condict Moore, M.D., Director, Surgical Oncology, James Graham Brown Cancer Center, were involved in the original draft of the booklet. The two cancer centers were initially drawn into the fray when the sponsor and proponents of the Bill agreed to a compromise which removed penalties for physicians who fail to hand out the booklet. Before the pamphlet was printed, it was revised 17 times, and various physicians reviewed the contents and made recommendations for revisions. After the pamphlet was finalized, the Cabinet for Human Resources wrote the introductory statement and requested the signatures of the directors of the cancer centers (to indicate their responsibility for the statements therein). Both physicians gave their signatures **reluctantly**.

The Committee, following a careful study, unanimously agreed on the following recommendations to the KMA Board of Trustees:

1. A statement be forwarded from the KMA to the Secretary of the Cabinet for Human Resources recommending that henceforth any medical pamphlets or documents prepared by the Commonwealth of Kentucky be signed by the Secretary or the Commissioner for Health Services rather than a private institution or practicing physician.
2. That future editions of the pamphlet, "Breast

Cancer: Treatment Options," be printed without the physicians' names and signatures.

3. That in the future, KMA be given the opportunity to recommend authors with regard to medical pamphlets and materials required by the State for physicians to distribute to their patients.

The Committee seriously questions the reasoning of the Kentucky General Assembly and other groups interested in the development and distribution of a new booklet when the Federal government and the American Cancer Society have pamphlets available.

In December, Nelson B. Rue, M.D., Chairman of the KMA Board of Trustees, corresponded with the Cabinet for Human Resources outlining the Cancer Committee's recommendations, which had been adopted by the KMA Board of Trustees. C. Hernandez, M.D., M.P.H., Commissioner for Health Services, wrote Doctor Rue on January 21, 1986:

> At Secretary Austin's request, I am writing in response to the concerns expressed in your recent letter to him and to the Association's "Resolution M" regarding the breast cancer treatment pamphlet which our agency prints and distributes.
>
> In accordance with the law (copy attached), our role is to print and distribute an informational brochure developed jointly by the State's two major cancer facilities. And while we, of course, would not hesitate to offer suggestions to the authors regarding the content of the brochure, we are not authorized to serve as co-authors.
>
> Complaints which you have received, as well as those expressed by others who view KRS 311.935 as intrusive entry into their medical practices, indicate that an effort by the Association toward modifying or repealing the legislation ought to be made. With the General Assembly now in session, this is the time to seek necessary change.

As a result of this letter, the Committee decided to focus its attention on Committee recommendation number three and that some input be given to the authors of the booklet by the KMA Cancer Committee. The KMA Board of Trustees, at the request of the Committee, appointed the Executive Director, McDowell Cancer Network, and the Director, Surgical Oncology, James Graham Brown Cancer Center, as members of the Cancer Committee (provided they are KMA members). House Bill 609, as originally passed, required these CEOs to develop the booklet. Both directors, who presently serve in these positions, have cooperated fully and completely with the Committee and have been an invaluable asset to the other activities and goals of the Committee.

After careful deliberation, the Cancer Committee reluctantly concluded that seeking changes in the booklet during the 1986 Kentucky General Assembly would create an even greater risk to practitioners in that penalties might be added to any further revision.

House Bill 609 (KRS 311.935) states that both centers, "shall jointly develop and submit to the Cabinet for Human Resources and **may periodically update** a standardized written summary, in layman's language and in language understood by the patient, of the advantages, disadvantages, risks and descriptions of all medically efficacious and viable alternatives for the treatment of breast cancer."

During the second meeting of the Committee, directors of both cancer centers advised the Committee that the Cabinet for Human Resources was debating whether to reorder a new printing of the booklet, which creates an opportunity to make revisions to the pamphlet.

While it is not within the KMA Cancer Committee's sphere to rewrite the booklet, the Committee members did believe that it was the responsibility of the Committee to make some recommendations. The directors of the cancer centers advised that it would be extremely helpful for them to receive revision recommendations. Subsequently, a letter was written to members of the Cancer Committee; the Kentucky Chapter, American College of Surgeons; and various specialty groups; the Louisville and Lexington Surgical Societies; and others who might be interested, requesting recommendations for revisions of the booklet to meet any objections to the present language. These suggestions were referred to the two cancer centers for their consideration.

While the Committee has spent a great deal of time and energy in responding to Resolution M, it has not ignored the various other activities going on with regard to cancer research and treatment. Our meetings have included reports from various sections of the state, the large cancer centers, and the American Cancer Society, which has been an integral participant of our Committee for years.

A report was presented regarding the status of the Tumor Registry by Gilbert H. Friedell, M.D., who is heading the statewide effort. The Registry will serve as a statewide data management network, recording information regarding individual cancer patients which will be placed in computer systems in participating hospitals. Sixteen hospitals are now actively participating and more are interested. Doctor Friedell noted that 37

out of 110 hospitals have 95% of all cancer patients. Therefore, it is the Registry's primary focus to get these 37 hospitals on-line in the near future, working with pathologists to develop a more inclusive Registry. This data management network will be used for purposes such as pooling information for studies, planning cancer programs, and pinpointing unusual clusters of cancers.

It was suggested that in an effort to acquaint all physicians with the work of the Statewide Tumor Registry, a Scientific Exhibit be available at the 1986 KMA Annual Meeting. The Committee unanimously endorsed this activity and has submitted the appropriate application.

Two other matters which the Committee considered are expected to generate discussion next year. Mammography guidelines were briefly discussed by the Committee. The Committee was informed that in 1984 the KMA Interspecialty Council submitted comments to Blue Cross and Blue Shield of Kentucky regarding its Mammography Guidelines. It was decided that this information should be forwarded to the Committee prior to the next meeting.

Finally, there is considerable concern with the risks associated with handling of chemotherapy agents which, according to Committee members, are not well defined. However, as Thomas M. Woodcock, M.D., Professor of Medicine at the University of Louisville and a member of the Cancer Committee has pointed out, "the implementation of reasonable guidelines would seem to be a prudent course of action." With Doctor Woodcock's assistance and participation by the Committee, we hope to have some recommendations and to be available to assist those who request our help.

On behalf of the Committee, we appreciate the opportunity to be of service and look forward to working with the Board of Trustees and the membership in the future.

P. Raphael Caffrey, M.D.
Chairman

Report of the Hospital Committee

The Hospital Committee did not meet during the 1985–86 Associational year. This Committee has historically been a very active one, but with the emergence of the Hospital Medical Staff Section, the issues and concerns previously addressed by the Committee are now covered by the HMSS. Therefore, the Committee makes the following recommendation for consideration by the Board of Trustees:

> That inasmuch as the KMA Hospital Medical Staff Section now addresses the issues and concerns previously dealt with by the KMA Hospital Committee, the Hospital Committee be disbanded.

John D. Perrine, M.D.
Chairman

RECOMMENDATION:

1. It is recommended that inasmuch as the KMA Hospital Medical Staff Section now addresses the issues and concerns previously dealt with by the KMA Hospital Committee, the Hospital Committee should be disbanded.

Report of the Emergency Medical Care Committee

The KMA Emergency Medical Care Committee is pleased to report to the House of Delegates that another highly successful Emergency Medical Care Seminar has been conducted. On June 10, 11, and 12, the Committee sponsored the 16th Annual Emergency Medical Care Seminar in Louisville. The Seminar attracted over 500 physicians, nurses, paramedics, EMTs, and other personnel employed or interested in continuing their education. The program is accredited by the AMA, American College of Emergency Physicians, American Academy of Family Physicians, Kentucky Nursing Association, Kentucky Board of Medical Licensure (paramedics), and the Cabinet for Human Resources (EMTs).

The major purpose of the Committee is to provide an opportunity for participants to update their skills and knowledge in emergency medicine. As a result, emergency medical personnel will be more prepared to render care in life-threatening situations. Special thanks go to Donald M. Thomas, M.D., who served as Planning Committee Chairman for the 1986 meeting. The meeting was well planned and the program content was excellent. We recommend that the Association sponsor the 1987 Emergency Medical Seminar under the auspices and direction of the KMA Emergency Medical Care Committee.

According to several members of the Committee, Federal agencies involved in emergency medical care appear to have reservations with regard to the quality and quantity of emergency medical care rendered in Kentucky. However, with one exception, Kentucky has ambulance services and well trained personnel in every

county, with over 305 ambulance services operating in the state. We believe that Federal officials are basing their observations on poor data and lack of knowledge of Kentucky. The Committee believes that this perception of Kentucky's emergency services should be changed. The Committee will look into this matter and report on its research next year.

E. Truman Mays, M.D.
Chairman

RECOMMENDATION:

1. The Emergency Medical Care Committee recommends that the Association sponsor the 1987 Emergency Medical Care Seminar under the auspices and direction of the KMA Emergency Medical Care Committee.

Report of the Interspecialty Council

The Interspecialty Council of the Kentucky Medical Association is self-appointed and is made up of 23 specialty groups in accordance with House of Delegates policy. Those specialty groups represented are as follows:

Kentucky Society of Allergy and Clinical Immunology
Kentucky Society of Anesthesiologists
Kentucky Chapter, American College of Chest Physicians
Kentucky Dermatological Society
Kentucky Society of Otolaryngology, Head and Neck Surgery, Inc.
Kentucky Society of Eye Physicians and Surgeons
Kentucky Chapter, American College of Emergency Physicians
Kentucky Chapter, American Academy of Family Physicians
Kentucky Society of Gastrointestinal Endoscopy
Kentucky Society of Internal Medicine
Kentucky Neurosurgical Society
KOGS-Kentucky Section ACOG
Kentucky Occupational Medical Association
Kentucky Orthopaedic Society
Kentucky Society of Pathologists
Kentucky Chapter, American Academy of Pediatrics
Kentucky Chapter, American College of Physicians
Kentucky Society for Plastic and Reconstructive Surgery, Inc.
Kentucky Psychiatric Association
Kentucky Association of Public Health Physicians
Kentucky Chapter, American College of Radiology
Kentucky Chapter, American College of Surgeons
Kentucky Urological Association

In the past year, we have written to the Council members seeking their input on items of discussion that might be brought before the Committee. However, we did not receive any requests for meetings, and due to the charge of this particular Council, elected not to hold a meeting. In addition, neither the Board of Trustees, House of Delegates, nor insurance carriers referred inquiries or studies to the Council in the 1985–86 Associational year.

The KMA Ad Hoc Committee on Professional Liability Insurance has a representative from each specialty and the liability issue appears to be of utmost interest to the various specialty groups. The Interspecialty Council stands ready to assist the Association and appreciates the opportunity to serve the profession.

Paul J. Parks, M.D.
Chairman

Report of the Hospital Medical Staff Section

KMA's Hospital Medical Staff Section held its inaugural meeting in the KMA Headquarters on November 20, 1985. Representatives of 46 hospitals attended the program which had William W. Hotchkiss, M.D., Chairman of the Board of Trustees of the American Medical Association, as its keynote speaker. Introduced by Wally O. Montgomery, M.D., KMA President, Doctor Hotchkiss discussed recent changes in JCAH Accreditation Standards which have a direct impact on activity at the hospital staff level.

B.J. Anderson, Associate General Counsel of the American Medical Association, spoke on the legal relationship between a hospital's medical staff and its governing body. Presentations were followed by a lengthy question and answer session which was particularly informative to the HMSS representatives.

Plans for upcoming HMSS activities center on an annual gathering, to be held in conjunction with KMA's Annual Meeting. The program for the 1986 meeting will highlight developments in the areas of quality assurance and risk management; the recent change from KPRO to a for-profit PRO based in Indiana; review of protocols and procedures dealing with organ transplants; an overview of provisions in the recent Budget Reconciliation Act (COBRA) which affect hospital medical staffs; and

the Medical Licensure Board's requirements specifically related to conduct as a medical staff member. These presentations are to be followed by a panel discussion and question-and-answer period.

William B. Monnig, M.D.
Chairman

END OF CONSENT CALENDAR ITEMS

Report of the Committee on Continuing Medical Education

In 1985 it was reported that KMA had undergone a review of its accreditation program by the Accreditation Council for Continuing Medical Education (ACCME). At that time, reaccreditation had been granted pending some changes to the process. This year, further changes were requested by the ACCME as a result of its further review of KMA's program.

The ACCME is a voluntary coalition of national medical groups, which has assumed authority for accreditation of medical education activities. Its members are: the American Board of Medical Specialties, the American Hospital Association, the American Medical Association, the Association for Hospital Medical Education, the Association of American Medical Colleges, the Council of Medical Specialties, and the Federation of State Medical Licensing Boards.

Correspondence was exchanged throughout the year relating to procedural revisions. A final response to ACCME inquiries was submitted in July, and its final response is expected by late September or October. During this period of revision, no resurveys of KMA-accredited institutions were conducted. Because forms and processes were being changed and no finally agreed upon procedure had been defined, it was felt unfair for institutions to submit to review with the possibility that changes to their programs might later be required to meet ACCME standards.

During this evaluation time frame, a question arose as to the propriety of KMA accrediting institutions to provide CME and, at the same time, providing CME programs directly. Because the question had arisen, KMA suspended cosponsored and directly provided programs. To eliminate any further questions, the ACCME is being asked to separately review and accredit the CME Council as the official provider of programs. In this interim period, any organizations seeking KMA's cosponsorship have been referred to institutions KMA has accredited, which do have a clearcut authority to provide cosponsorship.

In the interest of providing ongoing communications, the Committee will send a representative to the ACCME annual meeting in October.

Nominations were solicited for the Educational Achievement Award. This award may be made annually, and is given to individuals who have made outstanding contributions in medical education in the clinical, scientific, or public education areas. This selection process has been completed, and the award will be presented during the first meeting of the House of Delegates in September.

Last year the Committee recommended to the House of Delegates that the Board of Medical Licensure be asked to require participation in CME activities as a condition of relicensure. This was done to bolster efforts directed toward professional liability insurance activities, in addition to enhancing the professionalism of the Association. The matter was referred back to the Committee by the Board of Trustees for further study. The Committee agreed to affirm this position and has formulated some suggested implementing actions, which appear as the recommendations following this report.

I would like to thank all the Committee members for their input and help during this year.

James E. Redmon, Jr., M.D.
Chairman

RECOMMENDATIONS:

1. The Committee on Continuing Medical Education recommends that KMA ask the Board of Medical Licensure to require participation in mandatory continuing medical education programs as a condition of relicensure with the following provisions:
   A. Each licensee must accumulate 15 CME hours per year of AMA Category 1 credits;
   B. Provisions should be made to minimize profits to the providers of CME credits;
   C. A uniform procedure should be used to record and report CME credits;
   D. Procedures should be established for exceptional cases;
   E. KMA should initially act in an advisory capacity to the Board of Medical Licensure in developing implementation strategies, and KMA should remain available in the long-term to advise if changes are required.

Recommendations, Reference Committee No. 2:

The Committee heard considerable discussion concerning the Report of the Continuing Medical Education Committee and its recommendations. The Committee was informed by members of the Continuing Medical Education Committee that the Committee did not have adequate time to document the validity of using or not using mandatory Continuing Medical Education (CME) as a condition for relicensure. The consensus of those speaking before the Reference Committee was that CME should not be used as a requirement or condition of relicensure.

The Reference Committee feels that an indepth review of this problem and the validity of mandating CME credits for relicensure is required. Reference Committee No. 2 recommends that Recommendation No. 1 of the Continuing Medical Education Committee be referred back to the Board of Trustees and/or the Continuing Medical Education Committee.

The motion was seconded from the floor. Sally S. Mattingly, M.D., Delegate from Fayette County, was recognized and made a motion that the recommendation of the Reference Committee for referral not be adopted, and the House be required to decide while the issue was open for discussion whether or not to ask the Board of Medical Licensure to require participation in mandatory CME programs as a condition of relicensure. The motion was seconded, and on a call for the vote, was defeated.

The Speaker then entertained the original motion of the Reference Committee for referral of Recommendation 1 of the CME Committee back to the Board of Trustees and/or CME Committee. The vote for referral carried 72 to 40.

Report of the Physician Manpower Committee

Through adoption of Resolution O, the Kentucky Medical Association was mandated to establish a Physician Manpower Committee. This Committee was directed to work with Kentucky's medical schools to estimate Kentucky's current and long-range needs for physician manpower and to project the optimal levels of enrollment of medical students and physicians-in-training necessary to produce sufficient physicians to meet Kentucky's needs without contributing to a significant oversupply of physicians at the state and national levels. The Committee met on multiple occasions and presents the following information likely to be of interest to all Kentucky physicians.

Thirty years ago, the United States had a shortage of physicians, and great efforts were made to resolve this problem through the establishment of new medical schools and enlargement of medical school classes. These efforts have borne fruit and, as predicted by the Graduate Medical Education National Advisory Committee (GMENAC), we are now facing, or in the near future will face, a surplus of physicians. The surplus is expected to reach 35,000 excess physicians by 1990. From 1963 to 1983, the number of physicians in the United States grew from 300,000 to 550,000, an increase of 88%, while the U.S. population was increasing by only 20%. During this same 20-year period, Kentucky's physician population has grown by 100%, from 2,866 to 5,701, while the state's overall population has increased by less than 20%.

A simplistic view of this problem would be to conclude that we have too many medical students in our medical schools, and the solution is simple—reduce the size of medical school classes. Unfortunately, there are other complex factors contributing to our physician surplus. Over the past five years, the number of U.S. medical schools has remained stable (127), and the number of graduates has also remained stable at approximately 16,300 graduates per year.

A major contributor to the number of physicans in the United States is foreign medical graduates, and more specifically in recent years, U.S. citizens who graduate from foreign medical schools. These physicians come primarily from the "off-shore" proprietary medical schools located in the Carribean or in Mexico. During the past five years, while the number of U.S. medical school graduates has remained stable, the number of U.S.-citizen graduates of foreign medical schools has increased by 400%, from 785 in 1981 to 2,922 in 1985. Suffice it to say that at least nationally we now have, or will in the near future have, an excess of physician manpower.

It is obvious that many approaches will be needed to attack the problem of excess physicians. Action will be required at both national and state levels. In the United States, the number of medical school graduates has been stabilized. A number of approaches to controlling the problem of "off-shore" graduates are being considered nationally and at the state level. These approaches include: (1) inspection and approval of these "off-shore" medical schools, (2) restriction of access to third- and fourth-year clerkships, and (3) reduction in the number of residency positions available. Legislation is being considered to reduce Federal subsidy to teaching hos-

pitals for foreign medical graduate training and eliminate student loans to U.S.-citizen foreign medical students.

The Committee has determined that, in Kentucky, fairly stringent controls are already in place. Our two medical schools basically do not allow clerkships for "off-shore" graduates, and they require that students meet Kentucky Medical Licensure Board requirements before acceptance to residency positions is granted. The Kentucky Medical Licensure Board requires that "off-shore" graduates have at least 75% of their clerkshops performed in hospitals that are fully accredited and that the hospitals have affiliation with a medical school in the United States, as well as residencies in the subject area of the clerkship approved by the Accreditation Council on Graduate Medical Education.

The Committee determined that other groups in the state would have a valid and significant interest in a physician manpower study. To this end, a meeting was held with the Executive Director of the Council on Higher Education, Harry Snyder, and members of his staff. They advised that health care personnel supply was an ongoing concern, and that the Council had accomplished considerable research in this area. As a result of this meeting, Larry Fowler, Director of Special Programs for the Council, agreed to meet with the Committee and lend his expertise. Contact with the Cabinet for Human Resources resulted in the assistance of Doug Bishop with the Department for Health Services, who directs physician manpower research for the State. Both of these gentlemen met with the Committee at subsequent meetings and were of great assistance.

As the year progressed, it became obvious that the Committee had to decide whether to take a "needs assessment" approach or a "comparison" approach to the physician manpower study of Kentucky. It became quickly apparent that to perform a "needs assessment" approach would require enormous research and manpower hours. Such a study would require further direction from the KMA House of Delegates.

From a "comparison" approach, it would appear that Kentucky will rank consistently below the average for all states in physician numbers per population. From 1963 to 1983, the number of physicians per 100,000 population has grown from 135 to 212 in the United States. During that same time period, the number of physicians per 100,000 population has grown in Kentucky from 94 to 155. At that time, Kentucky ranked 39th in terms of physicians per 100,000 population. Specific data regarding primary care specialties versus all other specialties was not readily available.

It is highly likely that we in Kentucky have a significant maldistribution of physicians, as do all states, especially since we are one of the most rural states and physicians tend to settle in metropolitan areas. It would appear that Kentucky, through the Department for Health Services and other agencies, has one of the more active programs to improve the maldistribution problem.

Measures being used include: (1) increased number of residencies in primary care, (2) residency and medical school training in rural physicians' offices and hospitals, (3) rural scholarships and loans (such as the Rural Kentucky Medical Scholarship Fund), and (4) rural communities' assistance to physicians establishing medical practice in underserved areas. To thoroughly study the extent of maldistribution problems will certainly entail major expenditures of time and money, should this study be deemed necessary.

In summary, it would appear that Kentucky, in comparison to other states, does not have a major problem with physician oversupply at this time, and maldistribution problems would seem to be similar to those of other states. We are facing a potential oversupply of physicians, and multiple approaches are essential to control the excess.

We must consider that a state invests approximately $150,000 for each physician through 7-11 years of medical school and residency training. Each physician generates approximately $250,000 per year in health care charges, and in a 30-year career will generate $7,500,000 in health care charges. The current 100,000 students in either medical school or residency training in the United States today provide a 7-11 year pipeline. In view of this long pipeline, we must recognize that changes made today will not be felt until the mid-1990s.

A new American Medical Association task force on physician manpower is conducting an extensive evaluation of this problem. It has already concluded that we can anticipate further increases in the physician-patient ratio, and that these increases may significantly affect the cost and quality of medical care. The Committee plans to follow carefully the developments of the AMA task force.

The Committee was also assigned Resolution E to consider, which dealt with funding sources for physicians in training; and Resolution F, which alleged illicit compensation by physicians in training for select residency positions.

Resolution E asked KMA to study the funding problems of physicians in training and assist the Resident Physicians Section in attempting to influence funding-related legislation. The Committee found that funding for training positions directly relates to manpower supply adequacy. Further evaluation of adequacy is necessary before a full review of funding problems can be considered.

The AMA House of Delegates adopted essentially the same view in June. Its Council on Medical Education stated that "the configuration and size of the graduate medical education system must reflect anticipated health needs . . ." As Federal funds for graduate education diminish, other sources must be found. Current AMA policy calls for medical education costs to be borne by "payers of patient care costs." With regard to funding legislation, the Committee has directed ongoing staff review of pending legislation and coordination with the Committee on National Legislative Activities.

Resolution F called on KMA to try to identify residency or fellowship positions "for sale" and forward notice of any such programs to the Accreditation Council on Medical Education. A discussion with resident physicians and a medical student indicated that this practice apparently is not occurring in Kentucky. The issue surfaced during a meeting of the AMA Resident Physicians Section. The AMA was contacted and it advised that this is not a widespread occurrence.

Further review of this matter by the AMA Council on Medical Education, as reported in June, produced no confirmation of this practice. The Council did point out that such an occurrence would run contrary to training accreditation criteria and would jeopardize an institution's status. The situation arose when a foreign-trained U.S. graduate advertised in a New York paper for a position.

The Physician Manpower Committee requests that the KMA House of Delegates provide further direction as to the extent of study needed regarding physician manpower in Kentucky.

Robert R. Goodin, M.D.
Chairman

RECOMMENDATIONS:

1. The Physician Manpower Committee recommends that the KMA House of Delegates provide further direction as to the extent of study needed regarding physicians manpower in Kentucky.

Recommendations, Reference Committee No. 2:

Reference Committee No. 2 reviewed the Report of the Physician Manpower Committee and felt that the Recommendation of the Committee was not sufficiently specific for action by the House of Delegates. Reference Committee No. 2 recommends that before the next Annual Meeting the KMA Board of Trustees provide further direction to the Physician Manpower Committee. The Reference Committee recommends this report be referred to the Board of Trustees.

Resolution B
McCracken County Medical Society
Disclosure of Hospital Patient Care Activities

WHEREAS, hospital boards are now venturing into businesses that affect patient care and patient referral practices, and

WHEREAS, medical staffs are not timely informed of these ventures and legal tying arrangements, and find that certain restrictions and constraints apply to their patients, and

WHEREAS, the medical staff is inherently responsible for the quality of care and all issues relating to patient care, now therefore be it

RESOLVED, that the KMA recommend to all medical staffs that a mechanism be developed whereby the hospital notifies the medical staff when business ventures, contracts, letters of intent, and all other legal tying arrangements that affect patient care are considered, including additional new services of the elimination of existing services, and be it further

RESOLVED, that all ventures and legal tying arrangements that affect patient care and the medical staff's inherent responsibility for the adequacy and quality of medical care be reviewed through these mechanisms for comment and recommendation before rejection or implementation by the hospital.

Recommendations, Reference Committee No. 2:

Reference Committee No. 2 considered Resolution B — Disclosure of Hospital Patient Care Activities introduced by the McCracken County Medical Society and recommends that the Resolveds be amended.

In the first Resolved, the words "provides timely notice to" should be inserted in the second line after the word, "hospital," and in the second Resolved, the phrase "KMA further recommends that" should be inserted in

the first line following "RESOLVED, that."

The Resolveds will then read:

"RESOLVED, that the KMA recommend to all medical staffs that a mechanism be developed whereby the hospital *provides timely notice to* the medical staff when business ventures, contracts, letters of intent, and all other legal tying arrangements that affect patient care are considered, including additional new services or the elimination of existing services, and be it further

RESOLVED, that *KMA further recommends that* all ventures and legal tying arrangements that affect patient care and the medical staff's inherent responsibility for the adequacy and quality of medical care be reviewed through these mechanisms for comment and recommendation before rejection or implementation by the hospital."

Reference Committee No. 2 recommends adoption of Resolution B as amended.

Resolution H
Fayette County Medical Society
Organ Donor Cards

WHEREAS, organ donation in Kentucky is low, about 60% of the national average, and

WHEREAS, obtaining signed organ donor cards is the basic step in creating public interest, awareness and cooperation in organ donation, and

WHEREAS, the Fayette County Medical Society has initiated a "Prescription for Life" program with initial emphasis on obtaining signed organ donor cards from physicians, and

WHEREAS, participation by physicians, will provide program credibility amd impetus to the community at-large, now therefore be it

RESOLVED, that the Kentucky Medical Association encourage all county medical societies in the state of Kentucky to develop the "Prescription for Life" program in their communities, and be it further

RESOLVED, that the Kentucky Medical Association assist all component societies in the implementation of the "Prescription for Life" program.

Recommendations, Reference Committee No. 2:

Reference Committee No. 2 considered Resolution H — Organ Donor Cards introduced by the Fayette County Medical Society. The Committee recommends adoption of this Resolution.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 2 as a whole.

Mr. Speaker, I would like to thank the other members of the Committee: Joseph E. Kutz, M.D., Louisville; David C. Liebschutz, M.D., Danville; Susan H. Prasher, M.D., Ashland; and Donald J. Swikert, M.D., Florence, for time spent in listening to testimony and for their opinions and assistance in preparation of this Committee report. I would also like to thank our secretary, Joanie Banks.

REFERENCE COMMITTEE NO. 2

Donald R. Neel, M.D., Owensboro, Chairman
Joseph E. Kutz, M.D., Louisville
David C. Liebschutz, M.D., Danville
Susan H. Prasher, M.D., Ashland
Donald J. Swikert, M.D., Florence

EDITORIAL NOTE: Unless otherwise indicated, the Reference Committee action on each Report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.

REPORT OF REFERENCE COMMITTEE NO. 3

Thomas M. Jarboe, M.D., Lexington
Chairman

Reference Committee considered the following Reports and Resolutions:

24. Report of the Maternal Mortality Study Committee
25. Report of the Committee on National Legislative Activities
26. Report of the Committee on State Legislative Activities
27. Report of the Committee on Impaired Physicians
28. Report of the Committee on Care for the Elderly
    Resolution Y—Seat Belt Legislation (Fayette County Medical Society)

Professional Liability Issues

Resolution F—Professional Liability Campaign Plan (Board of Trustees)

46. Report of the Committee on Constitution and Bylaws
    Resolution D—Alternatives to Malpractice Insurance (McCracken County Medical Society)
    Resolution E—Hospital Self-Insurance (Mc-

Cracken County Medical Society)

Resolution O—Dues Increase for Professional Liability Campaign Plan (Mercer County Medical Society)

Resolution P—Temporary Dues Increase (Jefferson County Medical Society)

Resolution U—Legislative Session on Liability Insurance (Jefferson County Medical Society)

Resolution CC—Effects of Liability on Vaccine Availability (Board of Trustees)

Resolution EE—Liability Insurance (Kentucky OB/GYN-Kentucky Section ACOG)

ITEMS FOR CONSENT

Reference Committee No. 3 reviewed the following items and recommends they be filed as indicated, by the consent of the House, without discussion:

24. Report of the Maternal Mortality Study Committee — filed
25. Report of the Committee on National Legislative Activities — filed
26. Report of the Committee on State Legislative Activities — filed
27. Report of the Committee on Impaired Physicians — filed
28. Report of the Committee on Care for the Elderly — filed

Reference Committee No. 3 would like to express appreciation to the authors of the reports which have been filed for their time and effort in gathering this information for the House of Delegates.

Report of the Maternal Mortality Study Committee

The Maternal Mortality Study Committee met twice during the 1985-86 Associational year to consider matters falling within its jurisdiction. The dates of the meetings were October 1, 1985, and April 18, 1986. Both meetings lasted approximately two hours. At the meeting in October, four cases were discussed; and at the April meeting, eight cases were discussed. The accompanying tables show the disposition of the cases.

The Committee reviewed the material gathered by John Petry, M.D. from sources in Frankfort. Doctor Petry then contacted various physicians and hospitals involved. The deaths are considered at length by members of the Committee, and time is given to deliberation of etiologic factors. The accompanying information shows the number of deaths discussed and whether they are direct or indirect obstetrical deaths. It should be stated that an indirect obstetrical death is one that would occur whether the patient was pregnant or not. Direct obstetrical death is one with factors in the pregnancy causing maternal demise. This does not necessarily impute fault on the part of the people or the institution caring for the patient.

Three cases have been published in the *Journal*, and more are forthcoming. The cases that have been valuable for teaching purposes are submitted to the *Journal* for consideration for publication.

A chart is also appended showing the maternal death rate in Kentucky and the numbers to date. In its deliberation, the Committee considers the cause of the maternal death and whether there is any one institution, physician, or locality that seems to have a repetitive problem needing further study or action. This does not seem to be the case. It is noted that there are more deaths in Fayette and Jefferson Counties, but these are attributed to the fact that these are large population areas and also because there are centers in these areas that can care for high-risk obstetrical situations.

It is a great pleasure to work with and chair the Maternal Mortality Study Committee. The very diligent work of Doctor John Petry should again be acknowledged for he spends many hours compiling the material and analyzing it for presentation to the members of the Committee.

John W. Greene, Jr., M.D.
Chairman

Cases Discussed — October 1, 1985
4 Maternal Deaths

			Autopsy
1.	Direct	Maternal infection	Yes
2.	Direct	Anesthesia	No
3.	Direct	Heart disease	Yes
4.	Direct	Ectopic Pregnancy	Yes

Cases Discussed — April 18, 1986 8 Maternal Deaths			Autopsy
1.	Indirect	Heart disease	Yes
2.	Indirect	Seizure activity	Yes
3.	Indirect	Auto accident	No
4.	Indirect	Auto accident	No
5.	Direct	Heart disease	Yes
6.	Indirect	Severe burns	Yes
7.	Direct	Ectopic pregnancy	Yes
8.	Indirect	Gunshot wound	Yes

Maternal Deaths-Kentucky		
Year	Total Deaths	Total Rate (No./100,000)
1966	34	58
1967	21	36
1968	15	27
1969	17	30
1970	22	37
1971	20	33
1972	22	36
1973	16	30
1974	15	28
1975	15	27
1976	13	24
1977	13	21
1978	8	14
1979	9	10
1980	17	29
1981	6	10
1982	8	21
1983	6	10
1984	6	10

TABLE 1-1.
Maternal Mortality in the United States
1935-1982

Maternal Deaths		Rate Per 100,000 Live Births		
Year	Number	Total	White	Other
1935	12,544	582.1	530.6	945.7
1940	8,876	376.0	319.8	773.5
1945	5,668	107.2	172.1	454.8
1950	2,960	83.3	61.1	221.6
1955	1,901	47.0	32.8	130.3
1960	1,579	37.1	26.0	97.9
1965	1,189	31.6	21.0	83.7
1970	803	21.5	14.4	55.9
1975	403	12.8	9.1	29.0
1980	334	9.2	6.7	19.8
1982*	330	8.9	—	—

*Provisional.

Report of the Committee on National Legislative Activities

The Committee on National Legislative Activities has noted a significant change in the legislative climate. During the past two sessions of Congress, most medical issues have not been subject to separate votes, but have been part of larger, omnibus measures. There continues to be an increase of so-called single-issue groups, who can afford to make total efforts on single bills, a luxury medicine is not afforded.

Even though political action committees (PACs) play a noticeable role in the political arena, they are undergoing a diminution of influence. This is so because while PACs are limited to $5,000 contributions per individual campaign, many campaigns' costs exceed the $1 million level. There are fewer cooperative efforts among previously aligned groups, so more and more, medicine stands alone. Finally, the overall legislative theme is expenditure reduction, which has culminated in the enactment of the Gramm-Rudman Bill. Gramm-Rudman calls for automatic and mandatory deficit spending ceilings each year.

In spite of these dynamics, the AMA remains as one of the most effective lobbies in Washington, due in good part to the efforts of state medical associations. The key to effective lobbying by the AMA is more intense local-level activity. The American Medical Political Action Committee (AMPAC) has undertaken independent support of certain candidates through television and other media advertisements. Independent support must occur without contact with or approval by a candidate. AMPAC has also conducted opinion polls on behalf of given candidates in certain key races, which are then provided to the candidate for his campaign use.

The AMA has encouraged and assisted in operating telephone banks to relay physician contacts with Congressmen, in many instances using the assistance of state medical auxiliaries. The AMA has also developed an arrangement with Western Union whereby on certain issues, individuals may call a central number and request that a prewritten message be sent to a given Congressman in their name.

All of these efforts are intended to overcome some of the negative aspects of the legislative climate already mentioned but, to reiterate, the best influence on the legislative process remains the direct contact from the physician in the legislator's district. It is gratifying to report that KMA's Key Contacts have been active and have done an effective job this year. In addition to at

least monthly contacts on various Medicare proposals, KMA's legislative contact system has been active not only with key Congressmen, but with members of other key committees of jurisdiction. These include the House Ways and Means Committee and Senate Finance Committee, with jurisdiction over Medicare; and the Senate Judiciary Committee, which has some jurisdiction in liability insurance issues.

Contacts were made to garner support for the AMA's liability bills, H.R. 3865 and S. 1804. Additionally, specific contact was made to support and provide positive comments on S. 2046, a bill relating to liability insurance problems, introduced by Senator Mitch McConnell.

On the issues which are singly identified and subject to distinct vote, the medical lobby has been quite effective. H.R. 4346, which would have amended the Defense Appropriations Act, required all physicians between the ages of 18 and 46 to remain draft eligible. This measure was defeated through a concerted effort, along with a pledge by the AMA to assist the Department of Defense in times of war or military emergency in obtaining necessary medical personnel.

H.R. 4825 would have required direct reimbursement to nonphysician providers under the Federal Employees Health Benefits program. This issue is still pending, but its progress has been stalled. A measure introduced by Senator Jack Kemp would have denied funds to any family planning program that provided counseling or referral services for abortion. Through AMA efforts and key contacts, this measure was defeated because of a physician's obligation to provide a full range of medical counseling, regardless of the social issue.

Senator David Boren had introduced S. 1806, which would have amended the Federal Elections Act to limit the total amount of contributions by PACs to individual candidates. This measure was defeated.

Not only does the Committee make direct contacts on legislative issues, but communicates on regulatory matters with Federal agencies as well. Throughout the year, contacts were made with the Health Care Financing Administration (HCFA) concerning uniform reimbursement by Medicare to all physicians in the state, regardless of the practice location; opposition to a claims processing slowdown which HCFA had directed to carriers, which was ultimately revoked; reversal of a provision by HCFA to deny claims based on data extrapolated from previously denied claims, and review of a situation where claims were reducing reimbursement to physicians when the carriers converted to CPT-4 codings.

In spite of comments made earlier about the diminishing influence of PAC contributions, it should be emphasized that PACS remain a significant force. Even though the Kentucky Educational Medical Political Action Committee's (KEMPAC) membership this year is up somewhat from last year, it is still inadequate when compared with the total KMA membership. In the event that individual members do not have any direct involvement in the political process or any relationships with legislators, the very least that can be asked is to join KEMPAC. The legislative efforts of medicine are hamstrung without this support.

The Committee would urge every member to become as active as possible at whatever level in the legislative process. Make it a point to get to know your legislative representative and seek contact with him. The Committee and the KMA Headquarters Office stand ready to assist any member in making such contacts, including provision of information about specific issues.

I would like to thank each of the Committee members — Key Contacts — for all their help this year, and I look forward to continuing vigorous activity in the coming year.

Fred C. Rainey, M.D.
Chairman

Report of the Committee on State Legislative Activities

Historically, the Report of the Committee on State Legislative Activities was used in legislative years to summarize KMA's activities during the Kentucky General Assembly. This year, as in 1984, things will be different, for the "Report to the Members of the Kentucky Medical Association — 1986 Kentucky General Assembly," has already been circulated to the entire KMA membership. I direct your attention to that Report, for it contains a wealth of information that will be useful to you in dealing with political and legislative matters.

As you go through the Report, you'll also note that I am stepping down as Chairman of this Committee. It has been my pleasure to hold several offices and to be actively involved with the Association for a number of years. Participation with this Committee and the legislative process has been one of the highlights of that endeavor. I extend best wishes to my successor and trust that he or she will find the activities of this Committee as challenging as I have.

One of the new Chairman's more severe tests will be addressing the "liability crisis" which plagues not only medicine, but cuts across the entire fabric of American society. KMA has devised a campaign plan to address these liability issues which expands on the beachhead we carved out during the 1986 legislative session. The plan, which calls for a wide array of efforts by the Association, the legislative task force formed to address liability questions, and a coalition of groups whose concerns parallel those of KMA, will be offered to you for consideration at the 1986 meeting of the House of Delegates.

Please remember, the "Campaign Plan" can be only as good as you make it. Without your participation at the grass roots the efforts of your leadership and staff will be thwarted. It's only with the presentation of a truly united front that we will prevail on the liability issue.

Carl Cooper, Jr., M.D.
Chairman

Report of the Committee on Impaired Physicians

The Committee on Impaired Physicians has met every two months during the Associational year, with additional meetings as needed. Because of the number of matters the Committee must deal with, monthly meetings are likely in the coming year.

The Committee continues to consider as its primary activity the benevolent concern for physicians with impairments and a fraternal responsibility to assist individuals and play an advocacy role on their behalf. However, the Committee has had to contend with an increasing number of administrative matters which are a detracting influence from its primary objectives.

To resolve this matter, the Committee has made informal contact with a number of other state programs and individuals and has determined that at some point in an impaired physician program's evolution, dedicated funding and staff become a necessity. Being aware of the obvious constraints surrounding new and unique budget issues, the Committee is not prepared to make recommendations at this time, but is continuing its study and will routinely keep the Board of Trustees advised of its progress.

The KMA program is still evolving, and is felt to work quite well, considering that it is overseen by volunteer members. To this point, the Committee has been fortunate in developing relationships with some of the recognized treatment facilities around the country and in-state, as well as establishing key contact individuals throughout the state. In the Committee's growth process, some mistakes have inevitably occurred, but the Committee is gratified to note continuing growth and progress. At some point, however, that progress will have to be closely reviewed from the standpoint of volunteerism as opposed to salaried individuals to direct the program.

Last year the Committee solicited donations for the Benevolent Fund, established by the House of Delegates, and was quite pleased to collect over $11,000 in individual contributions from the membership. This gracious expression of concern by the membership is most gratifying, and sincere and humble thanks is offered to all who participated.

The Committee reviewed a number of model acts for impaired physician programs around the country and determined that the key issues involved funding and the relationship of the program to the state licensing agency. The Committee is pleased to report that the voluntary relationship with the Kentucky Board of Medical Licensure is quite solid and continues to improve. While the Committee diligently shuns any sanctionary authority, close contact with the Licensure Board is crucial. The Licensure Board has referred individuals to the Committee in lieu of summary disciplinary action and, in turn, the Committee has been able to act as an advocate to the Licensure Board on behalf of some individuals.

Through administrative changes, the Licensure Board's investigative capabilities have been increased to include a full-time investigator whose duties are restricted to follow-up contacts. Routine communications with the Licensure investigators on individuals referred by the Board have been helpful, and the Licensure Board has generally assumed a very benevolent attitude in these instances. In addition, the Committee has been able to make a number of suggestions to the Licensure Board in dealing with individuals identified initially by the investigators, and these suggestions have been followed.

In its role as advocate, the Committee has sought to make available other supportive resources to recovering physicians in addition to relationships with self-help groups. Contact has been made with a locum tenens company that specializes in placing temporary physicians for other physicians who are undergoing rehabilitation. The Committee has also identified a major

university which has a continuing medical education update program geared specifically for recovering individuals.

This year the Board of Trustees appointed two new members, who provide more depth to the Committee membership and also satisfy problems of geographic representation.

The major difficulty that still confronts the Committee is the identification of physicians with problems and effective methods of confronting them. This problem can only be dealt with through the help of the membership and with the assurance that identifying these individuals is, most importantly, for their benefit.

There is a positive aspect to the fact that the Committee's work is increasing. This indicates that more contact is being made with individuals who have problems, but the Committee members remain convinced that there are many more problems that exist which are not identified. The Committee's continuing and caring concern is to help and to assist in helping, and for that the input of the membership is vital.

Thanks is an inadequate word to say to the Committee members who have given so freely not only their time, but themselves, to our work, but I would like to express my deepest appreciation for all they have done.

David L. Stewart, M.D.
Chairman

Report of the Committee on Care for the Elderly

The Committee on Care for the Elderly met approximately every two months this year. One of the primary focuses of the group was to make contact and establish liaison with a representative organization of the elderly. One individual was identified who was key to the state legislative efforts of the American Association of Retired Persons. However, it was learned from him that there was no statewide organization, as such.

Even though there are probably 130,000 or more AARP members in the state, the only organizations in existence are local groups. The Committee is continuing its efforts to make contact with the AARP, however, through state government and at the national level.

The Committee's intent was to make itself available to advise on health and medical matters and, at the same time, to identify and listen to the concerns of the elderly population. In addition, it was hoped that potential legislation at the state level might be considered that would be of mutual benefit.

A second major effort this year was the solicitation and accumulation of articles on aspects of care for the aging to print in the *Journal*, and so far, eight such articles have been developed. The purpose of these articles is to present discussions on common problems in dealing with elderly patients and, hopefully, to provide common-sense approaches to resolve them. Plans call for publication of an article every two months, with the approval of the Editors. The title of the series will be "Clinical Notes on Geriatrics."

Two new members were added to the Committee because they had expressed interest in the Committee's work, and the group was pleased to welcome S. Philip Greiver, M.D., of Louisville, and Mary Ann Henry, M.D., of Louisville.

The Committee reviewed Resolution R, adopted by the 1985 House of Delegates, which dealt with Medicaid funding. Essentially, the Resolution called for support of funding of primary medical services as a priority over less acute services, and the Resolution was accepted for information.

A continuing problem considered was an objective assessment of the need for long-term care beds as opposed to bed availability. According to the current State Health Plan, no additional intermediate or skilled-level beds are needed, and this view is bolstered by a moratorium placed on long-term care bed construction by the Governor. However, individual members noted that there were specific needs in their areas around the state. It seems, too, that the bed availability problem has been exacerbated by the prospective pricing system, which results in patients being discharged from hospitals before optimum recovery is achieved. The Legislature did acknowledge this problem by enacting legislation which would allow for "swing beds," and it was hoped that this may provide some relief.

With regard to long-term facility care, the Committee would recommend to all members that they exert whatever influence possible to assure that patients discharged to nursing homes be accompanied by adequate records, including a discharge summary.

A single or series of educational seminars has been under consideration for some time. Thoughts for such meetings have included a single, statewide meeting, regional meetings, meetings in conjunction with the medical schools, and meetings in conjunction with the nursing home associations. Currently, it appears that a number of meetings are routinely held and, in addition, the scientific program of the KMA Annual Meeting will

be dedicated to the care of the elderly patient. For this reason, the idea of a distinct seminar, produced by the Committee, is being held in abeyance.

Future directions the Committee intends to explore include the development of pamphlets or one-page information sheets for patients that would address seasonal health issues, such as heat stroke; common-sense advice on taking and storing medications; how to complete insurance forms, and other matters. The Committee will also continue to establish some routine contact with a representative group of the elderly.

I would like to express my thanks to all of the Committee members for their efforts and to Robert Klinglesmith and Sharon Heckel for their excellent staff assistance.

John C. Wright, II, M.D.
Chairman

END OF CONSENT CALENDAR ITEMS

Resolution Y
Fayette County Medical Society
Seat Belt Legislation

WHEREAS, the Kentucky General Assembly has chosen to defeat mandatory seat belt legislation, and

WHEREAS, it has been documented that there has been a decline of mortality and injury rates in states where seat belt legislation has been passed, and

WHEREAS, numerous deaths and injuries can be prevented by the passage of mandated seat belt legislation, and

WHEREAS, Kentucky's physicians are concerned with the health and well being of the citizens of the Commonwealth, now therefore be it

RESOLVED, that the Kentucky Medical Association seek during the 1988 Kentucky General Assembly mandatory seat belt legislation, and be it further

RESOLVED, that the Kentucky Medical Association set a priority the passage of mandatory seat belt legislation in the next Kentucky General Assembly.

Recommendations, Reference Committee No. 3:

Reference Committee No. 3 reviewed Resolution Y, Seat Belt Legislation, introduced by the Fayette County Medical Society, and recommends the deletion of the second "Resolved." With this deletion, the Reference Committee recommends that Resolution Y be adopted as amended.

One member of the Reference Committee did not agree with the majority and has filed a Minority Report of this subject, which is attached.

Professional Liability Issues
Resolution F
Board of Trustees
Professional Liability Campaign Plan

WHEREAS, there currently exists throughout Kentucky a "liability crisis" which directly affects the cost and availability of professional liability insurance, and

WHEREAS, as a direct result of this crisis the availability of health care to the people of Kentucky is being seriously and adversely affected, and

WHEREAS, the Kentucky Medical Association realizes that there is a strong and pressing need to alleviate this crisis, thereby benefiting the citizens of the Commonwealth and the members of the Association, now therefore be it

RESOLVED, that dealing with the "liability crisis" be, and is, the number one priority of the Kentucky Medical Association; that a dues increase, as outlined in Attachment A, which is appended hereto and made a part hereof by reference, be implemented, effective January 1, 1987; and that the full amount of such increase for two consecutive years be specifically earmarked for the Professional Liability Campaign, and be it further

RESOLVED, that the KMA does hereby adopt the Professional Liability Campaign Plan set out in Attachment B, which is also appended hereto and made a part hereof by reference.

Recommendations, Reference Committee No. 3:

Reference Committee No. 3 reviewed Resolution F, Professional Liability Campaign Plan, introduced by the Board of Trustees. The Reference Committee recommends that the word, "current," be inserted prior to the words, "number one priority," appearing in the first "Resolved" so that the first "Resolved" would then read:

> "Resolved, that dealing with the 'liability crisis' be, and is, the **current** number one priority of the Kentucky Medical Association; that a dues increase, as outlined in Attachment A, which is appended hereto and made a part hereof by reference, be implemented, effective January 1, 1987; and that the full amount of such increase for two years be specifically earmarked for the Professional Liability Campaign, and be it further"

Reference Committee No. 3 recommends the adoption of Resolution F, as amended.

The motion was seconded from the floor. The Chair recognized Daryl P. Harvey, M.D., Delegate from Barren County, who made the following motion that Resolution F be amended as noted:

1. Be it resolved that the monies received from the dues increase will be allotted in the following manner; 75% of the funds be allocated to a public relation program to educate the public and the profession as to liability and the overall political, medical, socioeconomic aspects of Kentucky medical care.
2. Be it resolved that the other 25% be allocated to the legislative and judicial committees.
3. Be it further resolved that this House of Delegates like the June, 1986 AMA House of Delegates, reaffirm its support for free enterprise medical care, and that they publish the advantages, responsibilities and characteristics of private-fee for service medical care in monogram form for wide distribution for the profession, our patients and society in general.
4. Be it further resolved that an ad hoc committee be appointed composed of one member from each congressional district. The committee is to be empowered to choose its staff, its counsel and public relation firm. All committee members, staff and counsel shall be individuals who are emotionally and constitutionally oriented and motivated by and toward free enterprise. The full thrust of the committee is to be two-fold. It is to be the instrument of advocacy for the patient and the physician.

The motion by Doctor Harvey was seconded, but on a call for a vote did not pass.

The Chair then entertained a vote on the motion of the Reference Committee that Resolution F be adopted with the addition of the word "current" as noted above. The vote to adopt Resolution F as amended was affirmative.

Attachment A to Resolution F — 1986

(Note: The following is set forth in legislative amendment format with the new proposal appearing in boldface and the language to be deleted set off by brackets and accented by diagonals through the wording.)

1. CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Member, [$300] $400, (except those physicians elected to KMA membership within six months of the completion of their residency, fellowship or fulfillment of government-obligated service shall pay [$150] $200 their first full year of membership); (2) Life Members, no dues; (3) Associate Members, [$50] $75; (4) In-Training Members, [$20] $30, except that in-training members shall not be liable for dues during the first six months of their first postgraduate year in an approved residency program in Kentucky; (5) Inactive Members, [$25] $50; (6) Student Members, no dues; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be prorated on a quarterly basis as determined by the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments, together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary-Treasurer of this Association as of the first day of January each year.

Attachment B to Resolution F — 1986
KMA'S PROFESSIONAL LIABILITY INSURANCE CAMPAIGN
1986-88

Since the Kentucky General Assembly did not provide any tort reform to ease the professional liability crisis, the KMA Executive Committee requested that the Ad Hoc Committee on Professional Liability Insurance design a Plan to be implemented by the Kentucky Medical Association during the next two years and through the 1988 Kentucky General Assembly.

Responding to that charge, the Ad Hoc Committee on Professional Liability Insurance structured the Campaign Plan which follows. KMA's Executive Committee and the Board of Trustees have reviewed this Plan and unanimously recommend it for your adoption. The first portion of the Plan is in outline form, followed by suggestions and observations related to each item and presented under the title, "Background."

Resolution F of the KMA Board of Trustees states that dealing with the "liability crisis" is the number one priority of the Association. This will eliminate any doubt about how concerned the medical community is regard-

ing this problem, and such a statement will serve as a keynote or theme for KMA's campaign.

Because effective implementation of such a campaign will require funds unavailable through the general budget, that same resolution calls for dues to be increased as follows: $100 per year in regular, active dues, to $400 (except those physicians elected to KMA membership within six months of the completion of their residency, fellowship or fulfillment of government-obligated service shall pay $200 their first full year of membership); Associate Members, from $50 to $75; In-training Members, from $20 to $30; and Inactive Members from $25 to $50. All these increases are to be effective January 1, 1987, and the full amount of such increases for two consecutive years is to be specifically earmarked for the professional liability campaign.

Since the liability crisis affects the entire medical community, life members will be asked for a $100 per member contribution for two years or to give at a level they determine appropriate. Non-member physicians will be asked to join the Association or to make a financial contribution to the campaign equal to the amount of the two-year dues increase. Non-member residents will be asked to contribute $50 per year for two years. KMA will request that these non-member contribution be paid in one lump sum at the beginning of 1987.

Kentucky Medical Association Professional Liability Campaign

A. Governmental Activities

1. Kentucky General Assembly
   a. KGA Leadership and Key Member Visits
   b. Public Relations Campaign
   c. Key Contact System
   d. "Pyramid" Contacts on Issues
   e. Distribution of Printed Material
   f. Involvement in KMA Meetings & Activities
   g. KEMPAC Activities
   h. 1985 House of Delegates Policy on Liability
2. Legislative Task Force (House Joint Resolution 139)
   a. Fulfillment of House of Delegates Directive
   b. KMA Participation
   c. Parallel Activities
   d. Focus of Task Force Activity
3. Congress/Reagan Administration
   a. Key Contacts with Congressional Delegation
      (1) Washington Dinner
   b. AMA Liaison
4. Governor's Office
   a. Special Session
   b. Contact with Gubernatorial Candidates

B. KMA Membership Education and Involvement

1. Information dissemination; recognition of the roles an individual member might play; motivational activities
   a. Written material: the "Communicator," *Journal* Articles, White Papers, Special Packets or Liability Kits, etc.
2. Hire Special Staff
3. KMA Annual Meeting
   a. Open Session on Sunday Afternoon from 2:00 - 5:00 p.m.
   b. Special Reference Committee Meeting on Monday Afternoon - 3:00 p.m.
   c. KEMPAC Dinner Speaker to Address the Liability Issue on Monday Evening - 8:00 p.m.
4. Hospital Medical Staff Meetings
5. County Medical Society Meetings
6. Trustee District Meetings
7. Surveys; Data Collection; Preparation of Speeches, Legislative Testimony, Pamphlets, Sample Letters and other materials
8. Enhanced Liaison, Communication and Coordination with Specialty Groups.
9. Visitation Program
10. KMA Professional Liability Conference
11. Special Key Contact Seminar

C. Private Sector Initiatives

1. The Coalition
   a. Influence public and legislative opinion
      1. Speakers Bureau
      2. PR Campaign
   b. Seek maximum participation, but maintain core leadership
   c. Fund through assessment of Coalition members
   d. Investigate possible ATRA affiliation
2. Allied Health Groups
   a. Separate meetings to assure strong

support and participation

3. The Legal Profession
   a. KBA Liaison
   b. Judge-made law

D. Public Education

1. KMA PR Campaign
   a. Associational level
   b. Individual Physician level

Background

A. Governmental Activities

1. Kentucky General Assembly

a. KGA Leadership and Key Member Visits

We want to insure the maintenance of ongoing and consistent personal relationships with members of the Kentucky General Assembly. Emphasis will be placed on visits to House and Senate leadership and the Chairmen of several House and Senate committees. This will be expanded to include other key Senators and Representatives, and the basic approach will be the same. KMA leadership will meet with physician leaders within the respective legislator's district and explain KMA's concerns about liability. In turn, KMA leadership, accompanied by four or five of these local physicians and KMA staff members, will meet with this legislator and discuss the liability problem. A series of meetings may be required with followup primarily being done by local physicians and staff. These meetings will be organized geographically so that the leadership and key members within a given area can be contacted with a minimum amount of travel time and expense.

b. Public Relations Campaign

See Item D 1 (a) and (b) for a full discussion of the PR Campaign.

c. Key Contact System

A partial reorganization of the Key Contact System may be warranted, and this will be explored as visitations with members of the Kentucky General Assembly proceed.

d. "Pyramid" Contacts on Issues

In certain circumstances, we are thinking of bringing on line a "pyramid system" whereby one physician would agree to contact five others, each of those, once contacted, would agree to contact five additional doctors, etc., so that a ground swell of support for an issue would be demonstrated.

e. Distribution of Printed Material

This would be a part of KMA's effort to keep the General Assembly informed about liability issues. Policy statements, fact sheets, updates on the effect of the crisis on care delivery, etc., would be illustrative of the types of material distributed periodically.

f. Involvement in KMA Meetings & Activities

Greater involvement by KGA members in Association activities and programs, such as the PLI Conference and KEMPAC Seminar, ensures not only an enhanced awareness of KMA's position on issues, but also affords an opportunity to create a friendly working relationship. Building such friendships is an integral part of any successful plan for effecting legislative change.

g. KEMPAC Activities

KEMPAC, through its campaign contributions and other program activities, establishes a framework for garnering legislative support for KMA's reform initiatives. Our plan calls for petitioning the KEMPAC Board to increase its activities in the legislative area and to place emphasis on the liability issue.

h. 1985 House of Delegates Policy on Liability

The 1985 House of Delegates enacted directives concerning liability reform. One of these was satisfied by the creation of a legislative task force in accord with House Joint Resolution 139. The mandates to push for constitutional change, reform the collateral source rule, alter the statute of limitations for minors, and enact a measure establishing periodic payment of judgments, were not fulfilled, and all of these remain current KMA policy.

Our plan calls for pressing forward with these goals. However, we must also be aware of the need to remain

flexible as circumstances change and the recommendations of the legislative Task Force develop.

2. **Legislative Task Force (HJR 139)**
   a. **Fulfillment of House of Delegates Policy on Liability**
   Creation of the legislative Task Force is an affirmative response to one of the 1985 House of Delegates directives regarding liability reform and, therefore, it will play a vital role in our plan to alleviate the crisis in Kentucky.
   b. **KMA Participation**
   Richard F. Hench, M.D., President-Elect of KMA, has been appointed to serve as medicine's representative on this Task Force.
   c. **Parallel Activities**
   The Task Force does fulfill a directive of the House of Delegates, and some would observe that it is the "only game in town" when it comes to dealing with the liability issue. There is some element of truth in that, although we cannot ignore the need to proceed with our own agenda as outlined previously under Item A 1 (h). Our suggestion is that we move ahead on parallel courses, seeing how things develop and determining in the process where greater emphasis needs to be placed.
   d. **Focus of Task Force Activity**
   Even though the Task Force Resolution is framed in a fairly narrow way, calling primarily for an investigation of the insurance industry, our plan calls for pressing hard to ensure that this group looks into all facets of the liability problem.

3. **Congress/Reagan Administration**
   a. **Key Contacts with Congressional Delegation**
   1. Washington Dinner
   b. **AMA Liaison**
   Through the Committee on National Legislative Activities and our excellent liaison with the AMA, KMA will remain actively involved with initiatives at the national level. The Kentucky Congressional Delegation responds well to organized medicine's concerns, and we plan to articulate these in an even stronger way when we visit Washington in mid-1987. This visit, culminating in the Washington Dinner, provides an opportunity to demonstrate that KMA is interested in reform initiatives at both the state and national levels.

4. **Governor's Office**
   a. **Special Session**
   There is a strong possibility that a Special Session will be called either in late 1986 or early 1987. There is only a remote possiblity that professional liability will be one of the subjects covered in the Governor's call for the Special Session. Nevertheless, we plan to make use of the Special Session to the fullest extent possible. All 138 legislators will be in Frankfort, and this will present an opportunity to further our contacts and reinforce our position on the liability issue.
   b. **Contact with Gubernatorial Candidates**
   Historically, when a problem such as the "liability crisis" presented itself, the first stop would be the Governor's office. While things have changed dramatically during the last few years, there is the possibility that a Governor will reestablish that Office in a leadership role regarding the activities of the General Assembly. Legislative independence is currently the controlling force, but that may change, and we should be prepared in the event it does. Therefore, we suggest that discreet contacts be made with Gubernatorial candidates by members of the KMA leadership in order to determine how these people perceive the liability issue. Even assuming that there is less than a total resurgence of the Governor's control over the Kentucky General Assembly, a strong statement by the Executive Branch would be helpful in dealing with our problems.

B. **KMA Membership Education and Involvement**
   1. **Information & Roles**
   Emphasis should be placed on getting the entire medical community informed and involved in order to assure a united front. Historical background, white papers,

statistics, information on legislative activity, trends and other matters will be prepared and used to arm the membership with knowledge about this complex problem.

2. **Staff**

A portion of the funds generated by a dues increase would be used to provide salary for new staff whose primary role will be in the professional liability area. This will greatly assist in enabling us to maintain a close watch over developments in Kentucky, other states, and at the national level. While specifics remain to be worked out, it is anticipated that these personnel would maintain a data base, develop background information, and be of general assistance in providing resource material concerning liability issues.

3. **KMA Annual Meeting**

We suggest an open session on liability insurance be held on Sunday afternoon from 2-5 p.m. Sunday is a good time for such a program. It doesn't take people away from their office. Most people can drive to and from Louisville in a day, making the program available to all members and not just those attending the Annual Meeting. Such a session will be less constrained by scheduling problems, will allow more discussion of the issue, and will not conflict with other segments of the Annual Meeting. It will also provide an excellent opportunity for KMA leadership to display and explain the campaign plan which will then be in final form.

The special Reference Committee meeting on Monday afternoon will give people the opportunity to use information gained from Sunday's session. KMA leadership can also use this forum to further explain the campaign plan.

The KEMPAC Dinner will be the third step in this "educational process" and will relate more to the political concerns incident to affecting change in the liability area.

4., 5. & 6. **HMSS, County, & Trustee District Meetings**

Hospital staff meetings can be used as an effective tool for enhancing communication between KMA and physicians. These meetings can augment county medical society and trustee district meetings, and our appearance could be scheduled at a time when leadership and staff are already in an area to visit KGA leadership and members. Presentations of a similar nature can also be made before the staff of some of the larger clinics throughout the State.

Presentations before any of these groups should outline the realities of the legislative process, and KMA leadership can stress the need for physician involvement in the legislative arena. This can be expanded to cover specific tort reform measures, activities of the Legislative Task Force, or other matters of interest depending on the situation.

7. **Surveys, Data Collection, Preparation of Speeches & Printed Materials**

A survey regarding liability has already been sent to the entire KMA membership. This should be done again approximately six months before the 1988 Session convenes. Survey results will assist in evaluation of the level of interest and the amount of change that has occurred. Other data should be compiled concerning the extent of the problem in Kentucky. The Association needs to know if only some specialties, or a broad segment of the medical community, are plagued by liability concerns. This could be reflected by data on alterations in practice patterns, enhanced testing, termination of high risk procedures, etc.

Advance preparation of speeches, legislative testimony, and the marshaling of information from credible sources will assure that the Association can effectively address the liability issue and rebut assertions made by those adverse to our position.

8. **Liaison, Communication & Coordination**

Good lines of communication already exist between specialty groups as a result of the activities of the Interspecialty Council, and in particular regarding the liability issue, through the Ad Hoc Committee on Professional Liability. However, our plan still calls for greater emphasis in this area in order to assure a high level of cooperation. This might include KMA participation in specialty group programs

and activities. We will want to reinforce the fact that there is strength in numbers, and having one group split off now would be an invitation to failure rather than success.

9. **Visitation Program**
In order to ensure the proper level of awareness by KMA members, leadership and staff, we suggest that our visitation program be expanded. This would involve continued interaction with other states and the AMA, as well as increased attendance at outside meetings, seminars, and conferences addressing the liability issue. A great deal can be learned from this sort of activity that will assist KMA in its liability campaign.

10. **KMA PLI Conference**
A one and a half to two-day conference on professional liability in the spring of 1987 will continue to build the reservoir of information and awareness necessary to effectively attack the liability problem. This conference would involve both legislative and physician speakers and include a panel discussion involving members of the Coalition and the Task Force.

11. **Special Key Contact Seminar**
To be held in early December, 1987, the special Key Contact Seminar will address the fine points of the liability issue. This conference will also afford an opportunity to inventory our previous activities and assess how far we've come in preparing for the upcoming legislative session.

C. **Private Sector Initiatives**

1. **The Coalition**

a. **Influence public and legislative opinion**
One of the more effective tools for dealing with the liability problem is the broad based Coalition. Such groups allow diverse interests to speak with one voice on an issue. This obviously makes it easier to convince legislators that KMA concern about liability is not a singular one.

Steps have already been taken to keep alive the group which came together in an informal way during the 1986 legislative session. We will attempt to construct a Speakers Bureau within the coalition and will strongly suggest that this group effect a PR campaign on the broad issue of liability.

b. **Seek maximum participation, but maintain core leadership**
Our aim is to establish a core leadership or steering committee which will maintain fairly close control over the Coalition's activities. At the same time, there is unquestionably strength in numbers, and we would hope to enlist the support of as many groups as possible.

c. **Fund through assessment of Coalition members**
The Coalition must have funds in order to be effective. Traditionally such endeavors have been bankrolled by assessments levied against Coalition members. In other states, medicine has provided a great deal of fiscal support to coalitions and, if we are to develop a central leadership involving KMA and other members of the health care industry, contributions in excess of the norm may be needed.

d. **Investigate possible ATRA affiliation**
We are currently investigating the possibility of the Coalition becoming a component of the American Tort Reform Association.

2. **Allied Health Groups**

a. **Separate meetings**
Even though allied health groups will be members of the Coalition, it seems indicated that we have separate meetings with such groups to assure their strong support and participation in the overall liability campaign.

3. **The Legal Profession**

a. **KBA Liaison**
We have been involved in discussions with representatives of the Kentucky Bar Association about the need to resolve the liability crisis. Our plan calls for continued activity in this area and for use of the KMA-KBA Physician-Attorney Liaison Committee as a catalyst for expanded communication at the leadership level.

b. **Judge-made Law**
While myriad other factors will be explored in discussion of those matters

which give rise to the "crisis," this issue has been singled out for special consideration.

D. Public Education

1. KMA PR Campaign

The use of a public relations campaign is mentioned throughout our Plan for addressing the liability problem. PR will be involved in dealing with the legislature, the public, and other members of the private sector who may at this point be lukewarm to our concern. While our efforts will be integrated with those of the Coalition, we feel it is necessary that KMA have its own media campaign and that a firm be selected to define and oversee such an endeavor. In addition, KMA, either through the AMA or its own printing facilities, will provide pamphlets and other informational material for distribution by physicians to legislators, patients and other members of the public KMA will also be involved in an active effort to speak before specific audiences of opinion makers and community leaders. Another avenue for exploration involves the Insurance Information Institute which is currently using tv and radio spots to educate the public about what it terms "the lawsuit crisis."

At a different level, we would urge physicians to initiate individual programs. If doctors did at least one mailing to each of their patients seeking assistance for legislative change, a new source of support might be created. Sample letters could be supplied by KMA, and physicians could chose one or embellish on it as they wish.

Report of the Committee to Study the Constitution and Bylaws

The Committee to Study the Constitution and Bylaws met in order to consider a proposal for modifying the dues provisions for Active, Associate, In-training, and Inactive Members.

This proposal had been previously recommended by the KMA Ad Hoc Committee on Professional Liability Insurance, the KMA Executive Committee and the KMA Board of Trustees, and the revisions are hereinafter set forth for your consideration as Recommendation 1.

Robert L. McClendon, M.D.
Chairman

RECOMMENDATIONS:

(Note: The following is set forth in legislative amendment format with the new proposal appearing in boldface and the language to be deleted set off by brackets and accented by diagonals through the wording.)

1. CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Member, [~~$300~~] **$400**, (except those physicians elected to KMA membership within six months of the completion of their residency, fellowship or fulfillment of government-obligated service shall pay [~~$150~~] **$200** their first full year of membership); (2) Life Members, no dues; (3) Associate Members, [~~$50~~]**75**; (4) In-training Members, [~~$20~~] **$30**, except that in-training members shall not be liable for dues during the first six months of their first postgraduate year in an approved residency program in Kentucky; (5) Inactive Members, [~~$25~~] **$50**; (6) Student Members, no dues; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be prorated on a quarterly basis as determined by the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments, together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary-Treasurer of this Association as of the first day of January each year.

Recommendations, Reference Committee No. 3:

Reference Committee No. 3 next considered the Report of the Constitution and Bylaws Committee, calling for a dues increase for the Professional Liability Campaign.

Reference Committee No. 3 recommends that the Report of the Committee on Constitution and Bylaws be adopted.

Resolution O
Mercer County Medical Society
Dues Increase for Professional Liability Campaign Plan

WHEREAS, the Mercer County Medical Society agrees with the intent of the Professional Liability Campaign Plan as set forth by the Board of Trustees, and strongly feels that said Plan should be enacted, and

WHEREAS, the Mercer County Medical Society feels that the dues increase to fund the Plan should be limited to that end, now therefore be it

RESOLVED, that the dues increase of $100 per member per year be limited to two consecutive years, and that after that two years, the dues will revert to the former amount of $300 unless specifically increased by further action of the House of Delegates at that time.

Resolution P
Jefferson County Medical Society
Temporary Dues Increase

WHEREAS, according to the KMA "Communicator," the Board of Trustees plans to recommend that dues be increased to provide funds for a Professional Liability Campaign, "and the full amount of such increases for two consecutive years is to be specifically earmarked for the Professional Liability Campaign," and

WHEREAS, presumably, such dues increase would thereafter continue indefinitely, now therefore be it

RESOLVED, that any increased funding necessary for the "Professional Liability Campaign" be collected from the membership by way of a special assessment for a specified number of years or a **temporary** increase in dues for a specified number of years, after which dues would return to their previous level.

Recommendations, Reference Committee No. 3:

Reference Committee No. 3 considered together Resolution O, Dues Increase for Professional Liability Campaign Plan, introduced by the Mercer County Medical Society; and Resolution P, Temporary Dues Increase, introduced by the Jefferson County Medical Society. The Reference Committee recommends that Resolution O be amended by deletion and addition as follows:

> "Resolved, that the dues increase of $100 per member per year be limited to two consecutive years, and, that after [~~that~~] **those** two years, the dues [~~will~~] **be reviewed and changed, if needed,** by further action of the House of Delegates."

Reference Committee No. 3 recommends the adoption of Resolution O, as amended, in lieu of Resolution P.

Resolution D
McCracken County Medical Society
Alternatives to Malpractice Insurance

WHEREAS, many hospitals boards now require that medical staff members obtain liability insurance far in excess of amounts necessary to individually insure against malpractice litigation, and

WHEREAS, members of the KMA are now, or soon will be, finding it difficult to obtain sufficient liability malpractice insurance to qualify for medical staff membership in many hospitals in this Commonwealth, now therefore be it

RESOLVED, that the KMA explore the feasibility and risks to the physician and the medical staff of possible alternatives to malpractice insurance (such as escrow accounts or surety bonds) as a requirement of medical staff membership.

Recommendations, Reference Committee No. 3:

The Reference Committee reviewed Resolution D, Alternatives to Malpractice Insurance, introduced by the McCracken County Medical Society.

Reference Committee No. 3 recommends that Resolution D be adopted.

Resolution E
McCracken County Medical Society
Hospital Self-Insurance

WHEREAS, the hospitals of this Commonwealth are being held hostage by liability insurance companies, and they, in turn, are holding medical staffs hostage, requiring excessive liability coverage as a prerequisite for medical staff membership, now therefore be it

RESOLVED, that the KMA request that all hospitals self-insure in order to rid the Commonwealth of these gouging, insurance-selling scoundrels and polliwogs.

Recommendations, Reference Committee No. 3:

Reference Committee No. 3 considered Resolution E, Hospital Self-Insurance, introduced by the McCracken County Medical Society, and recommends it be rejected.

Resolution U
Jefferson County Medical Society
Legislative Session on Liability Insurance

WHEREAS, there is a liability insurance crisis facing Kentucky and, indeed, the nation, and

WHEREAS, the physicians of Kentucky and their patients are being particularly affected by the financial burden and distrust which accompany such a crisis, and

WHEREAS, this crisis is continuing to mushroom beyond the control of the judicial system and beyond common sense, and

WHEREAS, the many and various demands for the time and attention of the legislators and staff during a regular legislative session divert and sidetrack them from the full and concentrated effort such an important issue must have, now therefore be it

RESOLVED, that the Kentucky Medical Association shall ask the Governor of Kentucky to call for a special session of the Kentucky Legislature to deal with the liability insurance crisis, listing the medical liability problem as one major area to be addressed.

Recommendations, Reference Committee No. 3:

The Reference Committee reviewed Resolution U, Legislative Session on Liability Insurance, introduced by the Jefferson County Medical Society, and recommends that the "Resolved," of the Resolution be amended by deletion and addition as follows:

> "Resolved, that **at the appropriate time** the [~~Kentucky Medical Association~~] **KMA Board of Trustees** ask the Governor of Kentucky to call for a special session of the Kentucky Legislature to deal with the liability insurance crisis, listing the medical liability problem as one major area to be addressed."

Reference Committee No. 3 recommends that Resolution U be adopted, as amended.

Resolution CC
Board of Trustees
Effects of Liability on Vaccine Availability

WHEREAS, there now exists a critical shortage of diptheria, pertussis, tetanus (DPT) vaccine nationally and in-state, and

WHEREAS, this vaccine is not only a proper and medically necessary medicine for all children, but its administration is a required school admission criterion, and

WHEREAS, the vaccine is not only difficult to obtain, but its cost has increased nearly 300% in recent years, and

WHEREAS, availability is directly related to manufacturers' refusal to produce the vaccine because of proven product liability exposure and high costs have resulted from the real need to protect against that exposure, and

WHEREAS, this condition has produced a significant threat to the health and wellbeing of the children of the Commonwealth and has hampered the quality of medical care provision, and

WHEREAS, this situation has exacerbated related medical liability problems which are having and will have a profound effect on the medical welfare of all citizens of the state, now therefore be it

RESOLVED, that the high cost and unavailability of DPT vaccine is a predicament created by unchecked vulnerability to liability actions, and be it further

RESOLVED, that the vaccine situation is one example of further justification for modification of Kentucky's Constitution which prevents liability relief, and be it further

RESOLVED, that members of the Kentucky General Assembly be advised of this situation and urged to provide appropriate legislative relief.

Recommendations, Reference Committee No. 3:

Reference Committee No. 3 reviewed Resolution CC, Effects of Liability on Vaccine Availability, introduced by the Board of Trustees. The Reference Committee felt that the first two "Resolveds" of Resolution CC would have more appropriately been included in the "Whereas" portion of the Resolution since they call for no action by the Association. For that reason, Reference Committee No. 3 believes the first two "Resolveds" should be deleted.

Reference Committee No. 3 recommends that the words, "in a timely fashion," be added to the remaining "Resolved" of Resolution CC so that the single remaining "Resolved" of Resolution CC would then read:

> "Resolved, that members of the Kentucky General Assembly be advised, **in a timely fashion**, of this situation and urged to provide appropriate legislative relief."

Reference Committee No. 3 recommends that Resolution CC be adopted, as amended.

The motion was seconded from the floor. William B. Monnig, M.D., a member of the Board of Trustees, was recognized, and made a motion that the remaining Resolved, as recommended by the Reference Committee, be adopted with an additional amendment to read:

RESOLVED, that members of the Kentucky General Assembly be advised, in a timely fashion, of the situ-

ation of the high cost and potential unavailability of DPT vaccine, and urged to provide appropriate legislative relief.

The motion was seconded and carried.

Resolution EE
Kentucky OB/GYN Society-
Kentucky Section ACOG
Liability Insurance

WHEREAS, liability insurance for many high liability risk specialties in medicine has become not only prohibitively expensive, restrictive in scope of coverage, and available from a limited number of sources, and

WHEREAS, as the Kentucky Medical Association-sponsored insuror, KMIC, has an obligation to be representative of the interests of Kentucky physicians and their patients as well as be fiscally responsible for the company, and

WHEREAS, the Board of KMIC is at present composed of nearly all physicians in relatively low liability risk (and cost) classes, and

WHEREAS, there is a deficiency of representation of high liability risk specialties on the Board, and

WHEREAS, the cost of "tail" coverage is extremely expensive and prohibitive in the case of early retirement from medical practice, and

WHEREAS, the cost of tail insurance to KMIC from reinsurors may be negligible or available at no cost to KMIC upon the retirement from practice of a physician at any age, now therefore be it

RESOLVED, that the Board of Trustees of the Kentucky Medical Association cause the KMIC Board to ensure that each class of insured is adequately represented on the Board, and be it further

RESOLVED, that the Board of Trustees of the Kentucky Medical Association cause the Board of KMIC to effect a policy whereby tail coverage is provided free to a physician upon his retiring from the active practice of medicine at any age, and be it further

RESOLVED, that the Board of Trustees of the Kentucky Medical Association cause the KMIC Board to publish yearly loss ratio data for each class of insured from 1980 to the present, and to update this on a yearly basis, to allay concerns regarding fair pricing procedures for each class of insured.

Recommendations, Reference Committee No. 3:

Reference Committee No. 3 considered Resolution EE, Liability Insurance, introduced by the Kentucky OB/GYN Society-Kentucky Section ACOG. The Reference Committee heard considerable testimony regarding this Resolution. Because of the complex issues involved and the late receipt of the Resolution, the Reference Committee recommends that Resolution EE be referred back to the Kentucky OB/GYN Society-Kentucky Section ACOG, for further study.

Mr. Speaker, I move the adoption of the Report of the Reference Committee No. 3 as a whole as amended.

Mr. Speaker, I want to thank the members of the Reference Committee who heard considerable testimony about a number of complex issues. Members of the Committee are Gordon W. Air, M.D., Crestview Hills; James E. Anderson, M.D., Owensboro; William D. Pratt, M.D., London; and Kenneth N. Zegart, M.D., Louisville. I also want to thank those who appeared before the Reference Committee to offer testimony and respond to questions. In addition, I want to personally thank Doris Crume for her assistance in the preparation of this report.

REFERENCE COMMITTEE NO. 3

Thomas M. Jarboe, M.D., Lexington, Chairman
Gordon W. Air, M.D., Crestview Hills
James E. Anderson, M.D., Owensboro
William D. Pratt, M.D., London
Kenneth N. Zegart, M.D., Louisville

Minority Report of Reference Committee No. 3

Resolution Y-Seat Belt Legislation (Fayette County Medical Society)

The minority report, filed by Kenneth N. Zegart, M.D., of Louisville, recommends the rejection by the House of Delegates of Resolution Y, Seat Belt Legislation, introduced by the Fayette County Medical Society.

Mr. Speaker, the minority recommends adoption of the minority report.

Kenneth N. Zegart, M.D., Louisville

Editorial Note: Unless otherwise indicated, the Reference Committee action on each Report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.

Report of the KEMPAC Board Chairman

Mr. Speaker, fellow delegates and guests,

As Chairman of the KEMPAC Board of Directors,

thank you for giving me the opportunity to report on KEMPAC activities this past year.

We express our appreciation to all of you who attended the seminar on Monday evening and are especially grateful to you who brought your Legislators. Doctor James H. Sammons, Executive Vice President of AMA who addressed the professional liability crisis left all with a clear message on the subject.

KEMPAC has contributed over $75,000 this year to candidates in the Kentucky primary and the general elections this year. AMPAC has honored KEMPAC's request for support of Kentucky candidates in the U.S. House Races and Senate Race... by contributing financial support, polls, *etc.*

This is the first year for KEMPAC's one membership class of sustaining membership for KEMPAC/AMPAC dues. Physician membership in KEMPAC and funds are at an all-time high. This is the good news — the bad news is the total membership is lagging and we are missing out on one of our greatest assets — the physician's spouse. We need total family involvement in our political activity.

The KEMPAC board is reaching for 2,000 members for 1986. This is an optimistic figure, and we need your help to reach our goal.

The 1986 KEMPAC awards will be presented for the following categories:

Congressional districts reaching their goal.

Trustee districts with the highest percentage of KEMPAC membership.

Specialty societies with the highest percentage of KEMPAC membership.

Individuals who recruit 10 or more members.

The individual who recruits the most KEMPAC members.

County societies with 100% KEMPAC membership

County society with the highest percentage increase over the previous year.

Pike county has set an example for other county societies by already reaching their goal of 100%.

The KEMPAC booth is set up in the lobby across from KMA's registration. You may pay your dues or recruit members there. We invite you to stop by.

In 1985, as in past years, the KMA House of Delegates reaffirmed its belief in the objectives of KEMPAC and AMPAC and recommend 100% participation by doctors and their spouses. It further recommended a vote of endorsement and encouragement of the KEMPAC organization to continue its worthwhile political efforts on behalf of our free enterprise system and the freedom of the art and science of medicine.

I move that you reaffirm this endorsement and approve KEMPAC billing with the KMA dues billing. I wish to ask that you include your contribution when sending in your other dues. This is your organization and you must support it!

On behalf of the KEMPAC board, I want to thank the KMA Board of Trustees, you Delegates, the Auxiliary to KMA and staff for your help and support.

Harold L. Bushey, M.D.
Barbourville

A motion was made, seconded, and carried to adopt the Report of the KEMPAC Board Chairman.

REPORT OF REFERENCE COMMITTEE NO. 4

John E. Downing, M.D., Bowling Green
Chairman

Reference Committee No. 4 considered the following Reports and Resolutions:

29. Report of the President, Blue Cross and Blue Shield of Kentucky
30. Report of the Committee on Medical Insurance and Prepayment Plans
31. Report of the Committee on Claims and Utilization Review
32. Report of the Coordinating Commission on Peer Review Activities
33. Report of the Committee to Investigate Changing Trends in Medicine

Resolution C — Peer Review Qualifications (McCracken County Medical Society)

Resolution J — Alternative Delivery Systems (Fayette County Medical Society)

Resolution L — Notice of Mandatory Second Opinion Reports (Franklin County Medical Society)

Resolution N — Third-Party Fee Discrimination in Kentucky (Tri-County Medical Society Shelby, Henry and Oldham)

Resolution Q — Patient Care Directed by Insurors (Jefferson County Medical Society)

Resolution R — Third-Party Certifiers' De-

mands (Jefferson County Medical Society)

Resolution W — Office of the Commissioner of Insurance (Fayette County Medical Society)

Resolution Z — Standard Medical Insurance Form (Fayette County Medical Society)

Resolution BB — Peerview Committees (Board of Trustees)

Resolution DD — KMA-Endorsed Medical Insurance Program for the Membership (William B. Monnig, M.D.)

ITEMS FOR CONSENT

Reference Committee No. 4 reviewed the following items and recommends they be filed or adopted, by the consent of the House, without discussion:

29. Report of the President, Blue Cross and Blue Shield of Kentucky - filed
30. Report of the Committee on Medical Insurance and Prepayment Plans - filed
31. Report of the Committee on Claims and Utilization Review - filed
32. Report of the Coordinating Commission on Peer Review Activities - filed
33. Report of the Committee to Investigate Changing Trends in Medicine - adopted

Report of the President Blue Cross and Blue Shield of Kentucky

This report provides the Kentucky Medical Association House of Delegates with a status of Blue Cross and Blue Shield of Kentucky's activities.

Competition in the marketplace for health care financing has seen a dramatic increase during 1985 and 1986. In this challenging and changing business environment, Kentuckians are increasingly looking to alternative delivery systems (HMO, PPO, etc.) to provide affordable health care. There has been an influx of HMO and PPO organizations and activities within Kentucky.

Blue Cross and Blue Shield of Kentucky has responded to marketplace demands by creating HMO Kentucky, Inc. and expanding our PPO product, Option 2000. Several major accounts have enrolled their entire employee base or converted the majority of their business to the Option 2000 Program. Since its introduction in the marketplace in January 1986, HMO Kentucky has experienced a predictable, steady growth.

Blue Cross and Blue Shield of Kentucky remains strong, both financially and in the marketplace. The Corporation's contingency reserves as of June 1986 represent 3.55 months of average benefit and operating cost. Currently, 1,136,835 members are enrolled in our programs, which represents 29.1% of Kentucky's population.

Claims volume for Blue Cross and Blue Shield of Kentucky stabilized during 1985, with approximately 3.7 million claims being processed for regular underwritten business. This represents the processing of more than 14,600 claims, totaling $2.2 million of underwritten benefits for each business day. The Plan's private business reimbursed providers of health care more than $567 million, including $237 million for professional services. Claims payment for private business remained relatively unchanged from 1984.

As a top-performing administrator for Medicare Part A and Part B, the corporation processed an additional 3.4 million Medicare claims in 1985. The Plan reimbursed providers $590 million as the fiscal intermediary for Medicare Part A, and $248 million for professional services as the Medicare Part B carrier.

Our Comprehensive Major Medical Health Benefit Program (based on the Usual, Customary and Reasonable Benefit Program) became the program of choice in the marketplace in 1985. Currently, almost 80% of Kentucky physicians participate in the UCR Program, which covers over 738,000 members. Payments for professional services under all of our UCR Programs totaled more than $139 million during this same time period.

One of the major corporate goals of Blue Cross and Blue Shield of Kentucky is to increase the number of claims submitted electronically. Our Provider Communication Network (PCN) is operational in 69 hospitals and 120 physician offices which submit claims electronically to Blue Cross and Blue Shield of Kentucky. Currently, nearly 40% of our hospital claims and 20% of our physician claims are transmitted through our Provider Communications Network for both private and government programs.

The PCN network has several features, including immediate access to benefit eligibility, and it provides electronic claims submission for both Medicare and Blue Cross and Blue Shield. The PCN Department now offers new products such as: freestanding physicians office computers; electronic claim submission through the use

of personal computers; "download" capabilities for mainframe computers to transmit electronic claims through a personal computer; and other additional software and hardware configurations.

There were several activities during the past 12 months which will have an impact on the financing and delivery of health care in Kentucky. Some of those activities are:

State mandated recognition of chiropractors and chiropractic services. This State mandate requires health insurers to provide the same benefits for chiropractic services that would also be provided for services of an M.D. or D.O. Benefits for chiropractic services will be added to our policies at renewal time.

Dedicated Provider Unit. We are currently implementing a dedicated unit to handle only inquiries from Kentucky physicians. Additional staff is being trained, and toll-free telephone lines are being added. We anticipate completing our statewide telephone network before the end of 1986.

1985 was a difficult year with a major claims system conversion. Delays in payments and backlogs of claims were not uncommon. We are very pleased to announce that we currently have virtually no backlog of claims and payments are being made in a very timely fashion. We appreciate your cooperation and support during this difficult time.

Customer Service activities have also been expanded. To meet the needs of our subscribers, we have also added additional staff and telephone lines to offer better service to our subscribers.

The corporate mission of Blue Cross and Blue Shield of Kentucky continues to be providing excellent service to groups and individuals who entrust us with their health care dollars. Achievement of this goal is based on effective working relationships with our accounts, subscribers, and providers of health care.

G. Douglas Sutherland
President

Report of the Committee on Medical Insurance and Prepayment Plans

The Committee on Medical Insurance and Prepayment Plans met November 13, 1985; January 15, 1986; and April 16, 1986.

House of Delegates Referrals

Last year the House of Delegates adopted Resolution L and Resolution T, both of which were subsequently referred to this Committee for implementation.

Resolution T called for the Commissioner of the Kentucky Department of Insurance to be asked to require all medical insurers and care delivery programs to advise their insureds of patient responsibilities in the claims process and of any other unique patient obligations, and that all members urge their patients to become familiar with their individual program requirements.

Resolution L asked that the Kentucky Medical Association work with the Kentucky Insurance Commissioner to require that all Kentucky health insurance plans jointly create, fund and staff a statewide clearinghouse offering physicians one central phone number for complying with preadmission certification, length of stay approval and other utilization control requirements of all third-party carriers operating within the Commonwealth.

The Committee is in total agreement with the intent of both Resolutions and feels that employers and third-party carriers often fall short of advising their insureds about the various utilization control requirements that patients must fulfill.

As a practical matter, however, it is very difficult to develop programs as called for in either Resolution, particularly Resolution L. Who would establish the criteria for preadmission certification? What individual or group would be responsible for changing those requirements? While numerous phone calls to several preadmission certifying bodies is undesirable, is it really more desirable to have one central group responsible for all preadmission certifications?

With these questions in mind, we arranged to meet with Gil McCarty, Kentucky Commissioner of Insurance, and Dale Creech, the Deputy Commissioner of Insurance, in January. The Commissioner was sympathetic to the problems outlined above and was willing to try to find some sort of answer to the problem, but pointed out that as the Committee suspected, this would not be a simple task to complete. Enabling legislation would be necessary to give the Commissioner the authority to implement and collect a fee to underwrite the program and additional staff would be required. Insurance Department records are not computerized so it would be difficult to keep information on these programs up to date. There was also concern about the possibility of legal action arising as the result of the

Department disseminating inaccurate information. Cost containment provisions incorporated in health insurance contracts change on a monthly basis in some cases, so there is a real potential that incorrect information could be given out, resulting in someone seeking redress from the party providing that information.

There are a number of companies that have employees in Kentucky but negotiate and purchase their health insurance coverage through their main office located in another state. The Kentucky Insurance Commissioner has no control over these companies or the content of their plans. In addition, a significant number of employers have become self-insured and are required by law only to file a notice of self-insurance with the Commissioner's office. The Department has very limited jurisdiction over third parties that administer self-insured programs.

The Committee emphasized that physicians need some type of standardized mechanism to determine if cost containment provisions are required. Often when carriers are called for information on their programs, physicians are required to spend a good deal of time on the phone, but may not get the information they need. The Committee suggested that companies be required to provide appropriate information on their insureds' cards. The Commissioner again cited the need for enabling legislation and indicated that he felt most carriers would oppose such a requirement because of the cost of printing and mailing new cards anytime coverage was changed. While our meetings with the Insurance Commissioner have not produced the results the Committee desired, we are maintaining contact with the Department and are hopeful that a satisfactory arrangement might be worked out in the future to address this need.

The Committee sent a letter to over 600 insurance carriers licensed to write health insurance in Kentucky, asking them to forward details of their utilization control requirements. That mailing netted approximately 50 responses, most of which indicated that their company did not write health insurance coverage. As you can see, cooperation on the part of most carriers was less than satisfactory.

The Committee also developed and submitted a Resolution to the AMA House of Delegates asking that the AMA initiate dialogue with certain national groups to discuss the problems physicians encounter with mandated cost containment programs. That Resolution was ultimately withdrawn because most of the issues we raised were addressed in a Report of the AMA Council on Medical Service which was submitted to the AMA House of Delegates at its June meeting.

Over the past several months the Council has been meeting with payors, employers, third parties and other concerned groups to explore the possibility of greater uniformity in administration and notification procedures. The national Blue Cross and Blue Shield Association and the Health Insurance Association of America were reportedly receptive to the concerns expressed regarding the administrative burdens imposed on physicians by these programs and recognized the need for increased educational efforts, particularly for patients.

The Council reported that those associations made a commitment to the AMA to explore methods for further alleviating some of the administrative problems and to attempt to bring some uniformity to the programs. The Blue Cross and Blue Shield Association has already established a committee of representatives from specific member plans to develop recommendations for standardization of preadmission review procedures. Some commercial companies are using subscriber identification cards, some of which are magnetically imprinted, which indicate any mandated cost containment requirements applying to that individual.

The AMA Council on Medical Service is also exploring the feasibility of developing informational materials for the physician's office alerting patients to the need to be aware of and to inform the physician of any cost containment requirements applying to their insurance coverage.

Finally, the Committee contacted all hospitals in the state asking if they would share with the Committee information they had with regard to utilization control mechanisms. We are pleased to report that response to that inquiry was very positive and resulted in a considerable amount of information which was compiled into a data base and published in the KMA *Journal* in June. The Committee was somewhat hesitant to publish this information because of the possible inaccuracies that could come from sources other than the carrier. However, the Committee felt the information might be somewhat useful and, for that reason, decided to go ahead and disseminate its findings. The Committee went to great lengths to try to implement the intent of Resolution L, and we do feel that we have partially succeeded. We will continue our effort to address this problem.

Last year the House also adopted Resolution N, calling for automatic direct payment of major medical benefits. This item was also referred to this Committee for

implementation. This issue has been before the Committee in the past and has been addressed in other final reports. The main problem with this concept is that deductibles and co-payments are usually involved and, oftentimes, with more than one provider. Currently, there is no good way to determine which provider should absorb the deductible. However, we note that a considerable amount of Blue Cross and Blue Shield's business is being changed from Usual, Customary and Reasonable to comprehensive major medical plans which pay participating physicians directly for covered service.

KMA Group Health Plan

The Committee has reported in the past that one of its main assignments has been to monitor the experience of the KMA Group Insurance Program that the Association has through Blue Cross and Blue Shield of Kentucky. Because the utilization of psychiatric services has had a significant impact on premiums for our coverage, an ad hoc committee was appointed to review our experience in this particular area. Doctor Warren Cox served as Chairman of the Subcommittee, which was composed of psychiatrists as well as members of the KMA Claims and Utilization Review Committee. The Ad Hoc Committee met twice last year and reviewed 24 cases. None of the cases examined revealed inappropriate utilization. There were two high-cost cases that had a profound effect on our utilization patterns, both of which were out-of-state hospitalizations. Although the Ad Hoc Committee, through Blue Cross and Blue Shield, wrote the hospitals to obtain specific information, its correspondence was ignored. Psychiatric claims are paid after care is delivered, so there is no good way to periodically review utilization until after services have been rendered.

The Ad Hoc Committee recommended that a mechanism be developed within the KMA Group contract which would require concurrent review when any case, including psychiatry, medicine and surgery, reached a length of 30 days' institutionalization or $50,000 in cost. That recommendation was carried to the KMA Board of Trustees and was approved and is now a part of KMA's Group Health coverage. We are most grateful to Doctor Cox and the members of the Ad Hoc Committee for the time and effort they spent on our behalf addressing this concern.

The Committee on Medical Insurance and Prepayment Plans also reviewed the overall experience for our Group Plan last year. Experience in our Low Option Plan was extremely good which resulted in a 15% decrease from the previous year's premium rates. Experience in our High Option Plan was not as good and the premiums for 1986 increased 7.7% from what they were previously. Blue Shield representatives suggested that the Committee consider adding Assurance Plus which is composed of preadmission certification, ambulatory surgical procedures, second opinions and other utilization control mechanisms. Assurance Plus would decrease our plan premiums approximately 5%. The Committee is cognizant of the fact that the House is on record in opposition to preadmission certification and, for that reason, did not pursue that option.

We did explore the possibility of developing a program of focused review within the KMA Group Plan. At our request, Blue Cross and Blue Shield staff did an exhaustive review of the utilization of KMA's Plan, but did not find any single area that would appear to benefit from focused review. There are few diagnostic admissions or long stays prior to surgery. Our group does have more than the average number of services provided to individuals covered under the Plan when they are hospitalized, but nothing appears inappropriate. The Committee did discuss the relative cost of in-state versus out-of-state hospitalization. It appears that out-of-state hospitalizations tend to be more expensive, so we are now in the process of trying to develop a cost comparison of hospitals in Kentucky and those outside the state.

One way to stabilize the cost of our Group Plan is to expand the number of individuals participating in our group. Efforts to maintain and/or increase member base within the Group, while adequate, have not been aggressive. As of July 1, 1986, the KMA Insurance Agency will become the agent of record for the KMA Group Plan. The Committee feels this is a positive step in that it will allow KMA's Agency to market the Blue Cross and Blue Shield Group Health Plan to our membership along with the other insurance programs now offered. The Agency plans to undertake a more aggressive campaign to enroll physician member groups which will expand the risk base and hopefully help stabilize premiums.

Other Items

Other items the Committee discussed with Blue Cross and Blue Shield this year included a hold harmless contract clause which was negotiated between the United Auto Workers and Ford and General Motors in their last contract renewal. That contract calls for a require-

ment that Blue Cross and Blue Shield assist covered individuals in challenging any legal or collection activities taken against a person for fees over and above the UCR fee from both participating and nonparticipating physicians. The Committee noted its displeasure with the clause but realizes that the contract was negotiated outside Kentucky. The Committee did suggest that Blue Shield advise nonparticipating physicians of this clause. Kentucky Blue Cross and Blue Shield also advised the Committee that, due to subscriber pressure, they are beginning to make lists of physicians who have signed participating agreements with Kentucky Blue Cross and Blue Shield available on request.

The Committee also discussed the implementation of numerous alternate delivery systems. Several states have recently developed, or are in the process of developing, society sponsored statewide IPAs and HMOs. The question arose as to whether or not KMA should begin looking at offering similar programs. The Committee feels that these plans are very new and none have as yet proven to be effective on a statewide basis. There is a real risk in developing competitive plans without undertaking significant measures to ensure that those providing services under the plan can be cost effective while rendering quality care. Because of the exclusionary nature of competitive plans, it seems inappropriate for KMA, as an organization, to sponsor such a program.

The Committee did feel, however, that there is a feeling of frustration among many physicians and that perhaps KMA should have some role in helping them determine what course of action might be most beneficial to them on an individual basis. Such assistance might take the form of contract analysis, counseling on various types of plans being put into effect, as well as information that would be useful in taking actions that would decrease exposure to scrutiny by governmental agencies. While it has no specific recommendations at this point, the Committee does feel it would be appropriate to develop information on this concept further with the intent of sharing it with the membership.

As you can see, the members of the Committee spent a considerable amount of time and effort working on behalf of the membership, and I am most grateful for their interest and faithful participation. The members of the Committee are: Glenn W. Bryant, M.D., Louisville; Warren M. Cox, M.D., Louisville; C. Douglas LeNeave, M.D., Mayfield; William B. Monnig, M.D., Edgewood; Donald R. Neel, M.D., Owensboro; Judah L. Skolnick, M.D., Louisville; and Gregory D. Wells, M.D., Inez.

Earl P. Oliver, M.D.
Chairman

Report of the Claims and Utilization Review Committee

The Claims and Utilization Review Committee has witnessed a significant decline in the number of cases referred this year. More than 90% of all claims reviewed were submitted by Blue Cross and Blue Shield.

With the reduced volume, the Committee has also experienced claims dealing with significant practice pattern problems. It is gratifying to report that many such issues were dealt with effectively at the District level.

There was an alarming incidence of cases referred involving the prescribing of schedule drugs. Most of these claims were identified through major medical or supplementary insurance filings. The Committee has been able to discern a trend regarding such claims, and many Committee members acknowledged that they had treated or were treating "problem" patients. Some of these patients had documentable and genuine chronic pain; some were receiving large doses of medication, but were being controlled by their physician; in some cases, the prescribing physician was unaware of the actual amount of drugs the patient was getting, particularly in situations where the patient was seeing a number of physicians or in group practices; and in some instances, the excessive prescribing was simply poor practice on the part of the attending physician.

Depending on the patient's initial medical problem, other medical care available, and individual considerations, the Committee would suggest that some of the following steps be taken if a physician has a "problem" drug patient. First, physicians should be particularly attentive to identifying such patients, and the patient should be advised of the volume of medication being taken and the possible dangerous consequences.

If medically appropriate, a reduction in the medication prescribed should be attempted. If this does not resolve the situation, the physician should consider referring the patient to other specialists to confirm the chronic condition and try to resolve or alleviate it with some other treatment. This referral might include psychiatric counseling.

If these efforts are not productive, the physician may simply refer the patient for total care to another phy-

sician or, finally, refuse to see the patient after adequate notice is given.

Dealing with these types of cases relates to another activity on the part of the Committee that has increased this year. The medical profession is constantly criticized publicly for failing to discipline its own members, and it is the feeling of the Committee that the operation of the peer review system refutes such claims. In addition, the Committee has referred six cases to the Board of Medical Licensure this year. These cases were reviewed at both the District and state levels, and Licensure referral was not undertaken without intense review and discussion and repeated contacts with the affected physicians. The disposition of these cases remains pending, but the Committee has also noted increased activity by the Licensure Board on disciplinary matters.

The Committee has identified another trend about which the membership should be aware. As companies and individual employee groups begin playing a greater role in determining medical insurance coverage, more and more restrictions are being imposed. One such restriction is reimbursement for various services at fixed amounts, with an exhortation to the insured that if a physician attempts to collect reimbursement above the amount fixed, the insurance company will assist the patient legally to prevent collection. Realizing the increasing numbers of companies writing insurance, as well as the various service delivery programs that are developing, the Committee would caution each member to pay close attention to such restrictions.

In a related area, the Committee has seen a number of claims where the attending physician has a contractural obligation to accept whatever payment is made, agreeing not to bill the patient for any additional amounts. If fees have been negotiated with a company prior to the provision of services, it is the feeling of the Committee that related claims should not be subject to review, with the exception of new procedures and other extraordinary matters.

I would like to record my sincere thanks to all members of the Committee and, particularly, to the members of the District committees, which play such a critical role in the review system. I would also like to note the Committee's appreciation for those attending physicians who have taken the time to come and discuss their cases and provide input.

K. Thomas Reichard, M.D.
Chairman

Report of the Coordinating Commission on Peer Review Activities

The Coordinating Commission on Peer Review Activities was created by the House of Delegates. Its purpose is to oversee and to direct issues to the various components of the peer review system.

The Commission consists of the Speaker of the House; a member of the Board of Trustees; and the Chairmen of the Judicial Council, the Claims and Utilization Review Committee, and the Committee on Impaired Physicians. The oversight authority of the Commission also extends to extraordinary matters which may arise that cross jurisdictional lines between the components of the system.

No issues developed this year which required the Commission's review, as all matters were dealt with by the individual committees and handled administratively by staff under the direction of the Board of Trustees.

Earl P. Oliver, M.D.
Chairman

Report of the Committee to Investigate Changing Trends in Medicine

The Committee to Investigate Changing Trends in Medicine met twice this year, on February 26, 1986 and June 25, 1986.

The charge to the Committee is to study and report on evolving delivery and payment mechanisms; to study and report on demographic trends affecting medical practice; to study and report on ethical questions regarding financial considerations versus quality of life; to investigate trends in cost containment activity, and to determine, to the extent feasible, the role of organized medicine in this changing environment.

Because of the rapid changes in medical technology, the number of physicians and nonphysician providers, funding, public attitudes, financial arrangements, and the proliferation of alternate delivery systems, many medical organizations have begun to review their mission to assure that they meet the needs of their membership. A question frequently asked in that regard is, if the organization ceased to exist today, what would replace it tomorrow?

The Jefferson County Medical Society recently completed such a process. Lelan Woodmansee, JCMS Executive Director, met with us to review the reasons this

Strategic Plan was developed, explain the process the Society used, and share its findings and some of the planning that resulted.

The JCMS Strategic Planning Committee was appointed in June of 1985, and was asked to "examine the socioeconomic environment facing both physicians and the Jefferson County Medical Society; review the range of activities currently provided by the Medical Society; and recommend a plan of action for the Medical Society for the next three to five years to meet the changing needs of Jefferson County physicians."

To accomplish that assignment, the Society engaged a Chicago-based consulting group that was experienced in medical socioeconomic issues. Through a series of phone and mail surveys, areas of concern were identified by the membership, and the Society obtained a clearer understanding of how it was perceived by its members. The attitude of members on various issues was clarified, which enabled JCMS to establish and prioritize a number of activities to fulfill the needs expressed by the membership.

Mr. Woodmansee noted that the final plan was a guide and would change periodically as circumstances warranted. He felt that the process of developing the plan was very important as it enabled leadership, as well as the general membership, to examine Society programs and to rethink priorities based on current circumstances. It also helped define roles the Society is best able to fill, as well as activities that are more appropriately implemented at the state, national or specialty society level. (Fayette County Medical Society also went through such a process after this report was developed).

The Committee feels that a similar process might be useful to KMA and plans to explore the concept further.

As the medical delivery and payment system continues to change, physicians must make decisions with which they often have no experience and, in most cases, are ill-prepared to deal with. Physicians are being approached and asked to enter into contracts with organizations with the implication being that if they don't, they will be left out. Others are being sought as "gatekeepers" to act as the patient's medical custodian, thereby determining whether or not referrals and hospitalization will occur. Some hospitals have set up insurance programs that initially paid a physician's customary fees, but now are asking for discounts as a condition for physicians to remain in the program.

Some physicians are ignoring the situation, hoping that it will eventually run its course and disappear. Some are contracting with every entity that invites them to join. Others are exploring the concept of unionization as a means of dealing with the unfamiliar area of negotiations and contracting. Many are seeking legal advice, but there are few experienced and knowledgeable consultants available. Some state or county medical societies have established physician-owned Health Maintenance Organizations and Preferred Provider Organizations with widely varying degrees of initial success, depending on any number of local circumstances.

The question the Committee discussed in both meetings this year was, what should KMA's role be with regard to alternate delivery systems, and how might it best serve the interests of the membership?

One clear trend in medicine the past few years has been a blurring of the distinction between hospitals and insurance companies, both in the nonprofit and for-profit sectors. The Partners Health Plan, METLIFE and Humana Care Plus are examples of this phenomenon in Kentucky. Humana Corporation has been at the forefront of this trend nationally as well as in Kentucky.

We were pleased to have Lawrence Tremonti, M.D., Medical Director for the Group Health Division of Humana, which markets Humana Care Plus, discuss his observations on the current medical climate.

Doctor Tremonti indicated his position with Humana required extensive travel, giving him a perspective of practice patterns based on a wide variation of locations, philosophies and circumstances.

There are six trends he sees continuing into the near future.

1. There is a movement to group practice. (The AMA defines a group as "three or more physicians formally organized to provide medical care, consultation, diagnosis and/or treatment through the joint use of equipment and personnel, and with income from medical practice distributed in accordance with methods previously determined by members of the group.")

Doctor Tremonti felt that IPAs are forerunners of large multispecialty groups.

There are several reasons for the movement to group practice. As medical competition increases, groups may be more competitive because of their superior ability to generate capital. Group practices are less expensive to operate than solo practices because they permit economies in the delivery of services. Groups offer the benefits of facilitating referrals and more flexible working hours. Some may be better able to absorb the costs of professional liability insurance. (According to the AMA

publication, *Medical Groups in the U.S., 1984*, both the number of groups and the number of physicians participating in groups are increasing. The number of groups has increased by 143% since 1969. Single specialty groups now represent 70% of all groups. Multispecialty groups are a decreasing proportion of all group practices, representing 18.3% of all groups in 1984. While family or general practice groups have increased by 125.8% since 1969, they represented almost the same percentage of the medical group population in 1984 as they did in 1969. The average size of all groups in 1984 was 9.1, with the average size of multispecialty groups reported as 26.6.)

2. There is an impending excess supply of physicians. This is another reason for the movement toward group practice and may push groups into tighter networks. Groups and hospitals will be able to select only well-trained, cost-effective physicians because of limited practice opportunities. In some areas, according to Doctor Tremonti, physicians are having a difficult time finding suitable practice opportunities and some are faced with declining incomes.

3. Business is beginning to move away from providing insurance benefits to its employees in favor of managed health care systems. Managed systems have provisions to assure that care is necessary and delivered in the most efficient and economical fashion.

4. Services are more frequently integrated and delivered through one central organization. Hospitals and physicians are contracting to provide various services such as home health care, ambulatory surgery and other outpatient services. Some large multispecialty groups are able to provide many of these services without the involvement of hospitals.

5. There is a movement away from the physician-directed system to a managed health system. Individual physicians are losing, and will continue to lose, control of the patient. Managed health care systems will determine where patients get care, what care they get, and in some cases, what physicians will give that care.

6. The cost to the physician to do business continues to increase. Physicians may be caught between decreasing patient loads and increasing overhead costs.

Humana Care Plus patients may choose any physician but are given strong incentives for hospitalization to take place in Humana hospitals or non-Humana hospitals that have contracted to take Humana Care Plus enrollees. Physicians have usually been reimbursed on a usual and customary basis in the past, but Humana is taking a greater interest in monitoring physician fees under Humana Care Plus and has a panel of physicians under contract to help establish a data base to determine the reasonableness of physician fees. Data capture is paramount in determining those physicians who are cost effective.

The Committee appreciated hearing Doctor Tremonti's comments, and many of the areas he discussed will receive further attention from the Committee.

We have noted, in previous reports, the various alternate delivery arrangements that have developed across Kentucky. In June of 1983, there were two licensed HMOs in Kentucky with 45,000 members. Today there are fourteen HMO/PPOs with 110,000 contracts, representing an estimated 250,000 members, according to the National HMO Census published by InterStudy.

As the result of this proliferation of alternate delivery systems, the physician is confronted with a bewildering array of contractual obligations, incentives to restrict the amount of services provided, and the potential loss of current patients to other participating providers at a time when the physician population is expanding at a greater rate than the state population as a whole; all in all, a very stressful situation for many physicians.

We were pleased to have Judah Skolnick, M.D., and Wendell Tyson, M.D., share their experience in setting up a mechanism which allowed them and their colleagues to be in a position to appropriately negotiate with any number of organizations seeking to contract for the delivery of medical services. Doctors Skolnick and Tyson are members of the medical staff at Jewish Hospital in Louisville. Physicians on the staff had been approached to enter into certain agreements as the result of contractual arrangements between the hospital and an insuror. As contract discussions began, it soon became apparent that outside advice would be necessary and that some type of structure would be desirable to legally negotiate with insurors. Because of the importance to the hospital of getting the agreements finalized, the hospital agreed to underwrite the initial cost of the consultants brought in to work with a nine-physician Steering Committee appointed by the staff. The Steering Committee was composed of hospital and non-hospital based physicians, and its role was to investigate the various options available and recommend action to the staff.

After meeting with several experts, the Steering Committee recommended the establishment of an organization called the Medical Center Physicians Association, a not-for-profit corporation. Members were assessed to pay for a consultant who was brought in to evaluate the medical market in Louisville, the types and numbers of medical plans offered and the sizes and types of employee groups covered under the various plans. Once complete, recommendations were taken back to the membership of the Medical Center Physicians Association, which voted to set up an Individual Practice Association. Physicians may be members of the IPA and the Physicians Association, the IPA but not the Association, or vice versa.

Still working with the consultant, the IPA negotiated several changes in the initial contract offered by the carrier which benefited the IPA members and the hospital. The group feels it is now in a position to negotiate with any third party that wishes to enter into a contractual arrangement with the members of the IPA.

As alternative payment systems propagate, it is in their best interest to contract individually with as many physicians as possible. Large numbers of physicians help in the marketing process because the more doctors that participate, the greater the chance a patient will not have to change physicians by selecting a given plan. Also, the more physicians involved as individual contractors, the less influence they have. The physicians' association should be small enough not to have an impact in a given market to the point that it controls prices, thereby inviting scrutiny by the Federal Trade Commission, but large enough that it can effectively negotiate satisfactory arrangements with carriers.

The legal and fiscal problems associated with delivery systems are complex, and it is usually not financially feasible for physicians to obtain advice from attorneys, accountants and other consultants on an individual basis. A cooperative effort offers several economies of scale in this regard. Both doctors stressed the importance of qualified consultants to the establishment and operation of such an organization. The Medical Center Physicians Association and Individual Practice Association may not be applicable to all circumstances, but do appear to have met the specific needs of the doctors involved in Louisville. The Committee is indebted to Doctor Skolnick and Doctor Tyson for sharing their experience with the Committee.

The Committee feels KMA can best serve the interests of the membership by providing information that will enable physicians to make informed decisions regarding participating in various plans. The Committee plans to establish references on consultants experienced in the areas of contracts, actuarial studies, negotiations, marketing, capitalization and the other legal and financial aspects of setting up or negotiating with an alternate delivery system, and efforts to that effect are underway.

The Committee hopes that such a resource bank, for use by KMA members only, will offer information on knowledgeable consultants and several successful programs that have been set up around the country. The Committee also hope to facilitate communication between interested parties so information can be exchanged as to how other physicians or organizations approach this issue. The Committee recommends that KMA continue its practice of periodically presenting programs on socioeconomic issues during nonlegislative years, and asks that the Board consider including a part of such a program on physicians' initiatives to address and influence the development of alternate delivery systems. We also feel that, most importantly, the Association must continue to serve as the patient's advocate on quality-of-care issues.

A major problem inherent in the restructuring of the medical payment system is access of the poor to medical services. Today's bottom line orientation does not bode well for the very sick, the very old, the very young or the very poor. Cost shifting is no longer possible. Government dollars are fewer at a time when more people need assistance. Medicine must continue to assure that our less fortunate citizens do not get swept aside by the wave of competition washing over the country today.

As Chairman, I appreciate the time and energy given by the members of the Committee and guests who have so unselfishly shared their experiences with us.

Nelson B. Rue, M.D.
Chairman

RECOMMENDATIONS:

1. The Committee recommends that KMA continue its practice of periodically presenting programs on socioeconomic issues during nonlegislative years, and asks that the Board consider including a part of such a program on physicians' initiatives to address and influence the development of alternate delivery systems.

END OF CONSENT CALENDAR ITEMS

Resolution C
McCracken County Medical Society
Peer Review Qualifications

WHEREAS, insurance companies and estranged governmental agencies continue to infringe upon the rights of licensed physicians in the Commonwealth of Kentucky to practice quality medicine in a manner and method prescribed in their communities, and

WHEREAS, initially local, peer review organizations continue to be more remote and are engaging retired and nonpracticing physicians who do not understand in depth contemporary practice issues, now therefore be it

RESOLVED, that the KMA ask all peer review related governmental agencies and all third-party payors to assure that peer review be performed only by local physicians engaged in the active practice of medicine with similar experience and expertise.

Recommendations, Reference Committee No. 4:

Reference Committee No. 4 considered Resolution C, Peer Review Qualifications, submitted by the McCracken County Medical Society. The Committee recommends the following substitute "Resolved":

> **"RESOLVED, that KMA request assurance from all government agencies with medical review components and all third-party payors that peer review in the state be carried out by physicians actively engaged in medical practice in Kentucky, and, whenever possible, with similar experience and expertise."**

Reference Committee No. 4 recommends the adoption of Substitute Resolution C.

Resolution J
Fayette County Medical Society
Alternative Delivery Systems

WHEREAS, there are a multitude of alternative delivery systems being offered in the state, and

WHEREAS, it is becoming difficult for physicians to be informed on the various health care delivery systems, therefore be it

RESOLVED, that the Kentucky Medical Association develop a data file on alternative delivery systems in the state for the information of the KMA membership, and be it further

RESOLVED, that the Kentucky Medical Association maintain current and appropriate information on alternative delivery systems.

Recommendations, Reference Committee No. 4:

Reference Committee No. 4 next discussed Resolution J, Alternative Delivery Systems, submitted by the Fayette County Medical Society.

Reference Committee No. 4 recommends referral of Resolution J to the Board of Trustees for study by the Committee to Investigate Changing Trends in Medicine.

Resolution L
Franklin County Medical Society
Notice of Mandatory Second Opinion Reports

WHEREAS, some third-party carriers and employers have instituted what are, essentially, mandatory second opinion consultants prior to the performance of selected surgical procedures; and

WHEREAS, these second opinion consultations are purportedly intended to foster better patient care, reduce unnecessary surgery, save money for the payor and patient, and inform both patient and physician alike of other possible options and treatment modalities; and

WHEREAS, present mandatory second opinion reports may provide the initial physician useful information and options for patient care; and

WHEREAS, many initial physicians are not aware of the names of second opinion consultants or the contents of their reports; and

WHEREAS, there is no consistent mechanism in place which informs the initial physician of the content of a second opinion consultation; and

WHEREAS, ignorance of the existence and content of a differing medical opinion may have an adverse effect on patient care and place the treating physician in potential medico-legal jeopardy in the event of an untoward outcome where the subject procedure is performed despite the differing second opinion, now therefore be it

RESOLVED, that KMA recommend to the Commissioner of Insurance that he require all health insurance carriers to establish a mechanism whereby either the insurance carrier or the second opinion consultant provides, in a timely way, a copy of all mandatory second opinion consultation reports (regardless of whether they are supportive or adverse), to the initial physician prior to scheduled surgical procedures to assist the initial physician in assessing alternate courses of patient care.

Recommendations, Reference Committee No. 4:

Reference Committee No. 4 next considered Resolution L, Notice of Mandatory Second Opinion Reports, submitted by the Franklin County Medical Society. The Committee recommends the following substitute "Resolved":

> **"RESOLVED, that as a matter of good patient care, second opinion consultants should provide, in a timely manner, a copy of all second opinion consultation reports (regardless of whether they are supportive or adverse) to the initial physician prior to a scheduled surgical procedure."**

Reference Committee No. 4 recommends the adoption of Substitute Resolution L.

Resolution N
Tri-County Medical Society
(Shelby, Henry and Oldham)
Third-Party Fee Discrimination in Kentucky

WHEREAS, all physicians duly licensed to practice in the state of Kentucky are considered equal by their peers, and

WHEREAS, the KMA does not support discrimination, and

WHEREAS, malpractice premiums are not prorated or discounted by location, and

WHEREAS, overhead costs are relatively equal throughout Kentucky, and

WHEREAS, Kentucky cannot attract nor hold physicians in rural areas because of allowable fee discrimination policies, and

WHEREAS, the KMA has the political capability to join the underpayed rural physicians with their better-compensated peers to establish equality in the eyes of our third-party payors, and

WHEREAS, the Medical Assistance Program does not differentiate the level of fees paid based on the physician's location, and

WHEREAS, rising health care costs are not due to rural health care providers' fees, and

WHEREAS, many physicians providing rural health care are practicing in medically high-risk populations needing special attention, and

WHEREAS, Blue Cross and Blue Shield of Kentucky openly admits discrimination even to its subscribers, often leaving the impression of lower quality of care by rural physicians, and

WHEREAS, Blue Cross and Blue Shield has a Medicare contract allowing discrimination, and

WHEREAS, other states in the union "Do Not Discriminate," for example:

Blue Cross/Blue Shield of Indiana
Blue Cross/Blue Shield of Michigan
Blue Cross/Blue Shield of Tennessee
Blue Cross/Blue Shield of Ohio
Blue Cross/Blue Shield of Illinois, and others,

now therefore be it

RESOLVED, that the Kentucky Medical Association refer this problem to the State Legislature, and be it further

RESOLVED, that the Kentucky Medical Association address Blue Cross and Blue Shield on the issue of discrimination, and be it further

RESOLVED, that if necessary, legal action be taken against third-party payors who discriminate without justifiable cause against one's location of practice.

Recommendations, Reference Committee No. 4:

Reference Committee No. 4 heard discussion on Resolution N, Third-Party Fee Discrimination in Kentucky, submitted by the Tri-County Medical Society (Shelby, Henry and Oldham). The Committee recommends that the first Resolved be deleted. It is further recommended that the second Resolved be adopted, and that the third Resolved be amended by inserting the word "considered" in place of the word "taken" in the first line. The amended Resolved would read as follows:

> **"RESOLVED, that if necessary, legal action be *considered* against third-party payors who discriminate without justifiable cause against one's location of practice.**

Reference Committee No. 4 recommends the adoption of Resolution N, as amended.

Resolution Q
Jefferson County Medical Society
Patient Care Directed by Insurors

WHEREAS, for the past decade the major thrust of all efforts to contain health care costs has been aimed primarily at reducing in-hospital stays, such efforts culminating in the Fall of 1983 with a dramatic drop of 20-30% of hospital census, and rather than accept this as a permanent fact, hospitals and hospital-owned health care providers chose to try to maintain an unrealistic

census from an ever-shrinking pool of hospitalizable patients, and

WHEREAS, in an effort to accomplish this goal, hospitals and hospital-owned companies entered the competitive market arena with a zest unparalleled in the history of medicine, offering insurance policies at reduced premiums, setting up HMOs, and securing physicians in an effort to market their hospitals, and

WHEREAS, in spite of these efforts, the hospital census has not perceivably improved; however, as costs continue to rise, it is becoming more apparent that the patients and the physicians are being asked to pay the price, with the end result being that the patients are being told how much health care they may receive, where it will be delivered, and by whom it will be administered, and

WHEREAS, some of these recently formed companies have gone bankrupt and others are losing millions of dollars, with the only course left for them to recoup their losses being to decrease the quality of care given, ration the amount of care, and force physicians to subsidize them by demanding discounts of the usual and customary professional fees, and

WHEREAS, the end result of these efforts is that physicians are losing control of the practice of medicine and patients are being asked to endure hardships dictated by their insurance coverage, and

WHEREAS, individuals have very little effectiveness against giant hospital corporations and practically no success in reaching the media for the purpose of exposing the facts, and now feel that it is time for organized medicine to become involved on a statewide level, now therefore be it

RESOLVED, that the KMA Board of Trustees appoint a Task Force to:

1. Study the problems of:
   a. Loss of patient's medical needs as a determinant of medical practice;
   b. Loss of patients' rights to freedom of choice of physician and hospital as dictated by third-party health plans;
   c. Pressure upon physicians and patients to compensate for the mistakes made by competing health care delivery plans, including certification requirements which may be excessively demanding, repetitive and abusive of the time of physicians and their office staffs;
   d. To come forth with a strong public statement pointing out the truth as to why an intolerable situation now exists, and urging physicians not to sacrifice quality of patient care.
2. To develop an appropriate vehicle through which all physicians could represent and protect themselves, and if necessary, to negotiate with other parties, and be it further

RESOLVED, that the KMA Board of Trustees take any appropriate action to implement these "Resolveds" and the recommendations of the Ad Hoc Committee.

Resolution R
Jefferson County Medical Society
Third-Party Certifiers' Demands

WHEREAS, concern for conservation of health care funds has brought many new ventures into the health care area, and

WHEREAS, these may not always be in the best interest of the patient or the physicians, now therefore be it

RESOLVED, that the physicians of the Commonwealth be informed, through the KMA information media, that they should not sacrifice quality of care because of pressure from third-party certifiers, and be it further

RESOLVED, that physicians be informed that they need not comply with third-party certifiers if they feel that they are too demanding, too repetitive or too abusive of the physician's time or the time of his/her office staff.

Recommendations, Reference Committee No. 4:

Reference Committee No. 4 next considered Resolution Q, Patient Care Directed by Insurors, submitted by the Jefferson County Medical Society, and Resolution R, Third-Party Certifiers' Demands, submitted by the Jefferson County Medical Society. Both Resolutions deal with similar issues, but the Committee also feels that all physicians in the Commonwealth will continue to practice the highest quality of care despite any outside pressures; therefore, the Committee recommends the following changes be made to Resolution Q: In the first Resolution, the words "appoint a Task Force" be deleted from the first line of the first Resolved. The amended first Resolved would then read as follows:

"RESOLVED, that the KMA Board of Trustees:

1. Study the problems of . . ."

In the second Resolved, the words "take any appropriate action to implement" should be deleted and replaced by "implement appropriately." The words "and the recommendations of the Ad Hoc Committee" should

be deleted from the second line of the second Resolved. The amended second Resolved would then read:

"RESOLVED, that the KMA Board of Trustees **implement appropriately** these Resolveds."

Reference Committee No. 4 recommends that Resolution Q be adopted as amended in lieu of Resolution R.

Resolution W
Fayette County Medical Society
Office of the Commissioner of Insurance

WHEREAS, there appear to be resource and other problems, as identified in KMA Report No. 30, which adversely affect the performance of the Office of the Commissioner of Insurance as he attempts to control, maintain oversight, coordination and data managing related to health insurance in Kentucky, and

WHEREAS, there appear to be problems specifically related to pre-admission certification, accessing and analyzing data, cost containment measures, frequent modification of reimbursement rules and procedures, lack of control of nationally negotiated contract provisions and inadequate regulation of self-insurance, and

WHEREAS, many of these deficiencies led to less than adequate public policy formulation and may adversely affect both the quality and accessibility of patient care, now therefore be it

RESOLVED, that the Kentucky Medical Association work with the Commissioner of Insurance, the Legislature, and the Executive Branch of the Government to strengthen the State's ability to manage regulation, coordination, oversight, data acquisition, and management responsibilities through enhancement of resources for the Commissioner's office, if indicated, and legislation as may be required to strengthen the State's capacity to regulate, coordinate, and maintain adequate accessible information for policy formulation and oversight purposes.

Recommendations, Reference Committee No. 4:

Reference Committee No. 4 next considered Resolution W, Office of the Commissioner of Insurance, submitted by the Fayette County Medical Society.

Reference Committee No. 4 recommends that Resolution W be referred to the Board of Trustees.

Resolution Z
Fayette County Medical Society
Standard Medical Insurance Form

WHEREAS, in the interest of cost savings, the State Legislature passed a statute requiring the Commissioner of Insurance to devise a standard insurance reimbursement form which is required to be used by all insurance companies doing business in Kentucky, and

WHEREAS, this form is not yet available, now therefore be it

RESOLVED, that the Kentucky Medical Association ask the Commissioner of Insurance to proceed with all due haste in devising a standard insurance reimbursement form.

Recommendations, Reference Committee No. 4:

Reference Committee No. 4 next considered Resolution Z, Standard Medical Insurance Form, submitted by the Fayette County Medical Society.

Reference Committee No. 4 recommends that Resolution Z be adopted.

Resolution BB
Board of Trustees
Peerview Committees

WHEREAS, Peerview, Inc., an Indiana-based professional review organization (PRO), has been designated as the PRO for Kentucky, and

WHEREAS, Peerview, Inc., has the responsibility for review of all claims of Kentucky physicians who treat patients eligible for Medicare and Medicaid benefits, and

WHEREAS, the PRO contract for Kentucky calls for a reduced level of review from past years; summary sanction authority; and final review decisions and program operations to be made by non-Kentucky individuals, and

WHEREAS, Peerview, Inc., has approached KMA requesting names of physicians to serve on various operational committees to deal with Kentucky claims, and

WHEREAS, KMA does not support the PRO operation in Kentucky, but recognizes that PRO activities will have impact on patient welfare and medical practice, now therefore be it

RESOLVED, that the Board of Trustees contact members who have served in various review capacities in the past and advise that unless opposed, their names would be furnished to Peerview, Inc., and be it further

RESOLVED, that Peerview, Inc., make contact at

its choice with these individuals regarding committee service, and be it further

RESOLVED, that furnishing members' names to Peerview, Inc., not be construed or intended as support or tacit endorsement of the PRO program operation in Kentucky.

Recommendations, Reference Committee No. 4:

Reference Committee No. 4 next considered Resolution BB, Peerview Committees, submitted by the Board of Trustees.

Reference Committee No. 4 recommends that Resolution BB be adopted.

Resolution DD
William B. Monnig, M.D.
KMA-Endorsed Medical Insurance Program for the Membership

WHEREAS, KMA endorses a medical insurance program for the membership provided by Kentucky Blue Cross and Blue Shield, and

WHEREAS, the KMA Committee on Medical Insurance and Prepayment Plans has performed a number of studies on the utilization of the plan which have shown that it is highly, but appropriately utilized, demonstrating its value to the membership, and

WHEREAS, price competition between carriers is a primary marketing tool and premium costs are of major importance in the decision-making process when coverages are being considered, and

WHEREAS, plans are available which offer premium reductions if utilization controls such as preadmission certification, second surgical opinions, and ambulatory surgery are added, and

WHEREAS, current KMA policy opposes preadmission certification which prevents KMA from offering KMA members the option of selecting programs which may offer lower premium costs, and

WHEREAS, some members may have no philosophical opposition to such cost containment measures and may wish to avail themselves of those lower premiums, and

WHEREAS, individual members are in the best position to judge for themselves the merits of medical insurance plans available to them and may desire lower premium costs in return for a commitment to utilization controls, now therefore be it

RESOLVED, that, on a trial basis, over the next two insurance contract periods (February, 1987 - February, 1989), the KMA Committee on Medical Insurance and Prepayment Plans and the Board of Trustees be authorized to investigate and offer to the membership a choice of those insurance products which they feel offer the best coverage at the best price, regardless of inherent utilization controls, as long as such controls are clearly identified, with a report on this experiment made to the House, as appropriate.

The Reference Committee heard discussion on Resolution DD, KMA-Endorsed Medical Insurance Program for the Membership, submitted by William B. Monnig, M.D.

After much discussion, Reference Committee No. 4 recommends that Resolution DD be adopted.

Mr. Speaker, I recommend the adoption of the Report of Reference Committee No. 4 as a whole.

I would sincerely like to thank the other members of the Committee: Larry C. Franks, M.D., Paducah; Bill H. Harris, M.D., Lexington; Martha Keeney Heyburn, M.D., Louisville; and Mark F. Pelstring, M.D., Covington; for their work. I would also like to thank Martha Coombs for her assistance in the preparation of this Report.

REFERENCE COMMITTEE NO. 4

John E. Downing, M.D., Bowling Green
Chairman
Larry C. Franks, M.D., Paducah
Bill H. Harris, M.D., Lexington
Martha Keeney Heyburn, M.D., Louisville
Mark F. Pelstring, M.D., Covington

Editorial Note: Unless otherwise indicated, the Reference Committee action on each Report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.

REPORT OF REFERENCE COMMITTEE NO. 5
C. Dale Brown, M.D., Paducah
Chairman

Reference Committee No. 5 considered the following Reports and Resolutions

34. Report of the Committee on Maternal and Child Health
35. Report of the Committee on Medicare and Other Governmental Medical Programs
36. Report of the Committee on Health Planning
37. Report of the Technical Advisory Committee on Physician Services (Title XIX)
38. Report of the Committee on Community and Rural Health

39. Report of the Committee on School Health, Physical Education and Medical Aspects of Sports
40. Report of the Subcommittee on Youth Education
41. Report of the Advisory Committee to CHR
    - Resolution K - Opposition to PRO Sanction Process (Warren County Medical Society)
    - Resolution S - Revised Standard HCFA-1500 Claim Form (Jefferson County Medical Society)
    - Resolution V - Kentucky Medical Assistance Program (Harold L. Bushey, M.D.)

ITEMS FOR CONSENT

Reference Committee No. 5 reviewed the following items and recommends they be adopted or filed, as indicated, by the consent of the House, without discussion:

36. Report of the Committee on Health Planning - filed
37. Report of the Technical Advisory Committee on Physician Services (Title XIX) - filed
39. Report of the Committee on School Health, Physical Education and Medical Aspects of Sports - filed
40. Report of the Subcommittee on Youth Education - filed
41. Report of the Advisory Committee to CHR - filed

Reference Committee No. 5 would like to thank all of the committees listed on the Consent Calendar for their efforts.

Report of the Committee on Health Planning

The Committee on Health Planning met on May 30 to review activities in the health planning area which had occurred during the Associational year. The 1986-88 State Health Plan was signed by Governor Martha Layne Collins in February 1986. The Plan was, in large measure, the product of the activities of two technical advisory groups, one dealing with acute and the other with long-term care. KMA was particularly well represented on the Acute Care Technical Advisory Group, and Doctors William Monnig and Danny Clark are to be applauded for their efforts. Their diligence in this area is witnessed by the absence of many of the Plan provisions which KMA found objectionable in the past. The Plan does reflect a change of focus in the planning area with greater emphasis being placed on the delivery of both acute and long-term care in other than institutional settings.

The Committee also took note of the report of the Governor's 36-member task force appointed to "reevaluate" the state's Medicaid Program. The report is quite lengthy and calls for a number of changes, several of which pertain to health planning. One such recommendation advocates abolition of the Certificate of Need Board. The Governor felt strongly enough about the propriety of that suggestion that she issued Executive Order 85-761, which established the Certificate of Need Authority. This was the beginning of something of an odyssey for the group charged with reviewing applications for certificates of need in Kentucky.

The law requires that the General Assembly ratify Executive Orders such as the one creating the Certificate of Need Authority. Senate Bill 327 would have confirmed that action, but in the last days of the 1986 General Assembly, it became embroiled in controversy and was defeated. In the normal course, the certificate of need process would then revert back to the Board system in effect prior to issuance of the Executive Order. Such was not to be, however, for the Governor and members of the Cabinet for Human Resources felt there was a strong need to reorganize this planning body. Therefore, the Governor issued two new Executive Orders, 86-364, which creates a Health Care Cost Containment Advisory Committee, and 86-366, which establishes the Commission for Health Economics Control. The latter group will take on all duties and responsibilities previously dealt with by the Certificate of Need Board and its successor Authority. The Cost Containment Advisory Committee is to provide counsel to the Governor concerning cost effectiveness within the Commonwealth's health care delivery system.

Therefore, the regulatory scheme surrounding certificate of need has changed dramatically. Kentucky has moved from a 21-member Board made up of part-time citizen volunteers to a three-person group which devotes full time to these matters.

The State Health Coordinating Council will continue to function in Kentucky. This group had gone through a number of organizational and name changes over the last few years, but House Bill 222 was confirmed by the 1986 General Assembly, and this officially brought the SHCC back into the process.

Despite all these changes, the question perhaps paramount before the Committee related to the future of

health planning in the state. The federal law establishing the health planning process is due to expire in September of this year. At the time of this writing, no proposal has been introduced to extend health planning and federal funding to the states beyond September. While the certificate of need process would continue to exist in Kentucky because of its independent statutory base, there is substantial question as to the continued maintenance of other activities related to the planning process.

The Committee will continue to monitor developments in this area. I would like to thank the members of the Committee and the KMA staff for their help in this regard.

Frederick A. Stine, M.D.
Chairman

Report of the Technical Advisory Committee on Physician Services (Title XIX)

The Technical Advisory Committee on Physician Services to the Title XIX Program is a Committee created by statute. Members are named by KMA, and they represent the profession to the Medicaid Program.

The initial major work in Medicaid this year was the study of the special Medicaid Program Review Advisory Committee appointed by Governor Martha Layne Collins, which completed its work in January. This Committee's charge was to review the entire Program and make recommendations for change. KMA was directly represented on the Committee by Immediate Past President Charles C. Smith, M.D., and practicing physicians provided testimony to the Committee on a number of occasions.

This Committee developed 46 recommendations. Of this number, 35 dealt with changes in the organizational structure of the Program, six dealt with redirection of Program efforts, and five related to expanding the Program or creating new benefits. These recommendations were referred to the Legislature, which also considered work done by a commission on medical care for the indigent composed of General Assembly members. A related bill, the Omnibus Health Care Reform Act, was further considered with the other recommendations. The legislative result was that some provisions were enacted, which included coverage of hospice care under Medicaid; steps to reduce the transfer of assets for purposes of Medicaid eligibility; upgrade of reimbursement to some providers, and confirmation of the moratorium on long-term care bed construction.

The only major recommendation that was adopted was a reorganization of the Division for Medical Assistance. The name was changed to the Department for Medicaid Services, with three subsidiary Divisions: the Division of Quality Standards, the Division for Reimbursement and Contracts, and the Division for Policy and Provider Services. The intended purpose of this reorganization was to elevate Medicaid to a Cabinet-level activity with a Commissioner as its head who had some policy-making authority.

Further changes to the Program were not forthcoming, primarily because of insufficient financing. State Government had estimated that a 9.8% increase in general revenues was necessary for continuation of all government services, but that the Medicaid Program would need a 13% increase to maintain its current level of operation. The actual amount of increase was 12.7%, which translates into a fiscal year budget of $577.5 million.

It was noted that Resolution R, adopted by the 1985 House of Delegates, called for funding emphasis on primary medical services rather than nonacute benefits. This position has at least tacit support by a number of provider groups and policymakers. The Resolution was submitted to the Special Medicaid Program Review Advisory Committee, the Governor, the Secretary of the Cabinet for Human Resources, the Kentucky Association of Health Care Facilities, the Chairman of the Kentucky General Assembly Committee on Health and Welfare, and the Commission to Study Indigent Health Care. Action specifically directed to the Resolution was not expected, but KMA's position was publicly established.

The Committee reviewed and considered a number of operational changes to the Program relating specifically to physicians and advised the Program accordingly. One area of study was a suggestion to include a "hold harmless" provision under Medicaid which would prevent family practitioners performing OB services in rural areas from being sued. With the assistance of the Kentucky Medical Insurance Company, the Committee prepared a report on liability insurance which touched on a number of related areas and, as a result, requested the support and endorsement of the Medical Assistance Advisory Council for the liability bills KMA had supported in the Kentucky General Assembly.

The Committee noted what it perceived as an unusually high claims rejection rate. It was determined by the program staff that the most common reason for claims rejection is missing or inappropriate codes. The Pro-

gram staff, however, agreed to review an entire claim before rejection in an effort to avoid resubmission.

The Committee noted concern about communications problems with Medicaid when seeking preauthorization for use of a drug not on the Formulary list. As a result of this inquiry, the Program added another WATS line and noted that the least busy time of the day to call was in the early morning.

Nursing representatives requested that the Committee review the fact that many routine laboratory tests not performed in a licensed laboratory were not reimbursed by Medicaid. This has been an ongoing concern of the Committee for many years, and it has been repeatedly requested that some routine tests, such as those performed in a physician's office, be reimbursed. At present, reimbursement is not allowed because of a lack of funding.

The Program had implemented a policy of reimbursing physicians at different rates depending on whether or not they were specialty certified. At the Committee's suggestion, no differentiation will be made between Board and non-Board certified specialists. This suggestion was adopted because of the dwindling Medicaid participation rate of physicians, as well as the overall low rate of reimbursement in general.

The Committee reviewed a protocol for home health visits, which the Program was in the process of revising. The primary change appeared to be an upgrade in reimbursement for these visits on a cost-based charge system. The Committee recommended that reimbursement not be increased.

With regard to the KenPAC Program, it was learned that as of March 1986, there was statistically sufficient physician participation for the Program to operate, and by July, 225,000 Medicaid recipients had been enrolled in KenPAC.

The Committee pointed out to the Program the continuing and significant subsidization of the Program by physicians through reimbursement at a rate far below charges. Physician altruism was further underscored by the participation in and accomplishments of the Kentucky Physicians Care Program, which is apparently unique. Physicians seem to be the sole provider group of individuals in the state which is making gratis services available.

After many years, the Committee was saddened to note the retirement of Robert N. McLeod, M.D., who has served on the Medical Assistance Advisory Council since its inception. Doctor McLeod has received acknowledgement from all groups with which he has come in contact and justly deserves our recognition for his tireless and effective efforts on behalf of Medicaid recipients and the profession over the years.

Harold L. Bushey, M.D.
Chairman

Report of the Committee on School Health, Physical Education and Medical Aspects of Sports

The Committee on School Health, Physical Education and Medical Aspects of Sports held the Fifteenth Annual Medical Aspects of Sports Symposium in five different locations throughout the state. The schedule and program chairmen were:

Owensboro,
April 19, 1986 ..... William McManus, M.D.
Louisville,
June 13-14, 1986 ..... Raymond Shea, M.D.
Madisonville,
June 20-21, 1986 ..... James M. Bowles, M.D., and Joseph Roe, M.D.
Lexington,
June 27-28, 1986 ..... R. Quin Bailey, M.D., and William H. Brooks, M.D.
Northern Kentucky,
July 25-26, 1986 .... Carl J. Brueggemann, M.D.

The different locations were selected so that the Symposium would be more accessible since the State Board of Education now mandates that all head coaches in the high-risk sports of football, baseball, basketball, soccer, and wrestling attend at least one symposium yearly sanctioned by the KMA Committee on School Health, Physical Education and Medical Aspects of Sports. The head coaches are also required to be recertified in CPR each year.

The program consisted of lectures, seminars and workshops. The Symposium is self-sufficient, with all expenses being paid by contributions from pharmaceutical and equipment manufacturers and by program registration fees. I would like to express my appreciation, and that of the other Committee members, to all the regional program chairmen for the endless hours they spent in developing this year's Symposium and to the Continuing Education Departments of the University of Kentucky College of Medicine and the University of Louisville School of Medicine for their assistance with the Lexington and Louisville programs. The Committee on School Health, Physical Education and Medical Aspects of Sports will be meeting again on August

28 to evaluate the programs and select dates and sites for 1987.

The 1986 State Boys' Football Playoffs were covered from the time of the district playoffs to the state championship by Committee members and other team physicians who offered their services and assistance to ensure that every playoff game in this state had medical coverage. The State High School Basketball Tournament held in Lexington was also staffed by members of our Committee.

The 1986 Kentucky General Assembly passed House Bill 219, which created an experimental incentive sports medicine program to assist local school districts involved in interscholastic sports. The purpose of this pilot project is "to reduce the rate of injuries and reinjuries by providing selected school districts with . . teacher-trainers who will develop sports medicine programs that will improve the health care and safety of student athletes." The legislation also calls for an 11-member Advisory Council for Sports Medicine Programs, appointed by the Governor and attached to the State Board of Education, to develop and make recommendations on this program to the Superintendent of Public Instruction and the State Board of Education. Three of the members of this Council are to be physicians, with the Chairman of the KMA Committee on School Health, Physical Education and Medical Aspects of Sports serving as Chairman of the Advisory Council, and the other two physicians recommended by said Chairman. The Governor is to name the Council members by August of 1986.

Unfortunately, the section of the legislation which would have provided an appropriation was defeated; therefore, members of the School Health Committee are currently seeking funding for this pilot project from corporations and private institutions. It will cost approximately $5,000 per region for the first year, or $80,000 statewide. If the program is successful, the number of trainers is to be increased as funding becomes available. We feel this program is an important step toward improving the health and safety of our athletes, and we would appreciate hearing from anyone who might be interested in helping finance this worthy program.

The Committee has been actively involved with the drug problem of athletes in the Commonwealth and has worked with the Executive Committee and Board of Trustees regarding abuse of growth hormones and anabolic steroids by some athletes. KMA considered this matter in 1984 and, at that time, sent a letter to the superintendents of all Kentucky high schools pointing out the dangers of the use of anabolic steroids by athletes. Since such usage appears to be on the increase, the School Health Committee again referred this matter to the Executive Committee with the request that it should be reviewed by KMA's Judicial Council and/or the Kentucky Board of Medical Licensure.

The Judicial Council adopted the position that the use and prescription of anabolic steroids in Kentucky in an attempt to increase athletic performance is unethical, which confirms AMA's policy statement on the use of drugs by athletes. The Board of Trustees forwarded this opinion to the Kentucky Board of Medical Licensure, which issued a statement that physicians prescribing steroids for this purpose would be subject to disciplinary action.

Several members of the Committee, headed by Ben Kibler, M.D. of Lexington, are currently preparing a brochure on the dangers of anabolic steroids and other drugs used by athletes. Once approved by the full Committee and the Board of Trustees, we hope to be able to make this brochure available to all high school coaches and principals for use with their sports programs.

The School Health Committee appreciates the cooperation of Kentucky's coaches, officials, superintendents and the Kentucky High School Athletic Association, who have been so helpful in continuing to monitor the safety of our athletes. As Chairman I would also like to thank all the members of this Committee for their diligence in serving during this Associational year, and the KMA Executive Committee and Board of Trustees for its support in our endeavors.

R. Quin Bailey, M.D.
Chairman

Report of the Subcommittee on Youth Education

As reported to you last year, the Subcommittee on Youth Education, after reviewing a tremendous amount of literature for the drug and alcohol interdiction program, developed educational packets for four audiences: kindergarten through Grade 5, middle school, high school and parents. Our primary need now is for funding and manpower to take this program throughout the state. Notification of this project has been disseminated to KMA members through the "Communicator" and the *Journal*. Several physicians have expressed a willingness to assist us, and for that we are grateful.

The 1985 House of Delegates referred our annual report to the Board of Trustees for further implementation and consideration of appropriate fiscal implication. The Subcommittee feels that for the program to be effective, many of the materials need to be available in sufficient quantity to disseminate to participants. The members felt the cost of providing packets for speakers would be affordable, but the material to be made available for distribution could be quite expensive and would be a financial burden the Association should not be asked to shoulder alone. The Subcommittee, therefore, requested and received permission from the Board of Trustees to solicit funds for this project from corporations and private institutions. Although we have one or two possibilities for funding, no commitments have been received.

We feel the program is an extremely good one, and our desire is to have KMA physicians and Auxiliary members throughout the State participate. The Department of Education is prepared to publicize the availability of this program to all areas of Kentucky once sufficient funding and manpower is in place. The program has effectively been used on a small scale by some Committee members in their local areas. We have a small quantity of the needed materials, and those physicians who are responding are receiving sample educational packets. We ask those physicians who can spare a small amount of their time to serve as a coordinator or an occasional speaker in their local areas to contact the KMA office. We need to have the manpower ready for action once funding becomes available.

As Chairman, I would like to thank all the members of this Subcommittee for their efforts and the Board of Trustees for its support.

R. Quin Bailey, M.D.
Chairman

Report of the Advisory Committee to CHR

The Advisory Committee to the Cabinet for Human Resources was established to provide a means of direct communication with the Secretary. The intent was to have direct liaison on issues that were either of an urgent nature or required informal but in-depth discussion.

The Committee consists of the President, President-Elect, Chairman of the Board, Secretary-Treasurer, and Chairman of the Committee on State Legislative Activities.

No formal meetings were held this year, although contact was made through correspondence, telephone calls, and casual meetings. In addition, because this was a State legislative year, no major nonlegislative issue arose that required discussion.

We are appreciative of the communications possible and available through this channel, and look forward to continued activity.

Nelson B. Rue, M.D.
Chairman

END OF CONSENT CALENDAR ITEMS

Report of the Maternal and Child Health Committee

The Maternal and Child Health Committee met on July 9, 1986. The primary purpose for this meeting was to discuss the increasing rate of infant mortality in Kentucky. This appeared to be the product of a number of factors. Members noted that Kentucky had the highest pregnancy rate among white teenagers in the nation. It was also pointed out that the vast percentage of these youngsters have less than an eighth grade education and are probably from a portion of the population less likely to access appropriate prenatal care. Projections indicate that Kentucky could have the fourth highest infant mortality rate in the nation in the near future.

The Committee noted that while the total number of births is tapering off, the number of teenage pregnancies is increasing. The result of that is fewer premium births and a greater number of high risk situations.

The Committee members discussed the possible mix of factors which came into play to produce this situation in Kentucky. Inadequate sex education in the schools; diminished funding levels for obstetrical care rendered to the indigent and Medicaid populations; lack of access to appropriate prenatal care; problems with referral of high-risk infants and mothers from areas of Eastern Kentucky; the effects of the medical liability crisis on physicians involved in obstetrics; and concern about the future availability of obstetrical care in the state represent only a few of the matters reviewed by the Committee.

With these things in mind, the Committee makes the following recommendations to the Board for its review and consideration:

1. That KMA go on record in strong support of sex education in the schools, beginning in grades 5 - 7, noting that Kentucky has a very difficult and major problem with young adolescent pregnancies; and that notification of this support be forwarded to the Super-

intendent of Public Instruction and the State Board of Education. It was suggested that KMA offer assistance in this matter.

2. That KMA recommend to the Cabinet for Human Resources that funding be expanded for obstetrical care of the indigent of Kentucky.

3. That KMA recommend to the University of Kentucky that it investigate the problem of the maternal transport program for its region and establish a strong perinatal program.

4. That KMA recommend to third-party carriers that appropriate compensation flow to physicians who are in attendance at high-risk deliveries, including all cesarean sections.

I wish to thank the members of this Committee for their interest in maternal and child health matters and their dedication in trying to see that the problems are resolved.

Danny M. Clark, M.D.
Chairman

RECOMMENDATIONS:

1. The Maternal and Child Health Committee recommends that KMA go on record in strong support of sex education in the schools, beginning in grades 5 - 7, noting that Kentucky has a very difficult and major problem with young adolescent pregnancies; and that notification of this support be forwarded to the Superintendent of Public Instruction and the State Board of Education. It was suggested that KMA offer assistance in this matter.
2. The Maternal and Child Health Committee suggests that KMA recommend to the Cabinet for Human Resources that funding be expanded for obstetrical care of the indigent of Kentucky.
3. The Maternal and Child Health Committee suggests that KMA recommend to the University of Kentucky that it investigate the problem of the maternal transport program for its region and establish a strong perinatal program.
4. The Maternal and Child Health Committee suggests that KMA recommend to third-party carriers that appropriate compensation flow to physicians who are in attendance at high-risk deliveries, including all cesarean sections.

Recommendations, Reference Committee No. 5:

Reference Committee No. 5 considered the Report of the Committee on Maternal and Child Health. The Committee would like to bring to the attention of the House its strong concerns with the problems of teenage pregnancies in Kentucky, as Kentucky has the highest pregnancy rate among white teenagers and the fifth highest infant mortality rate in the nation. Of additional concern are the long-range economic consequences of Federally mandated paternal child support until age 18, and a major medical concern is the increasing prevalence of sexually transmitted diseases.

Reference Committee No. 5 recommends the adoption of Recommendations 1, 2, and 4.

The Committee further recommends that Recommendation No. 3 be amended by inserting the phrase "in view of the fact that it does not have an existing program" at the end of the Recommendation. The amended Recommendation would then read:

3. The Maternal and Child Health Committee suggests that KMA recommend to the University of Kentucky that it investigate the problem of the maternal transport program for its region and establish a strong perinatal program **in view of the fact that it does not have an existing program.**

Reference Committee No. 5 recommends that Recommendation No. 3 be adopted as amended.

The motion was seconded from the floor. Danny M. Clark, M.D., a member of the Board of Trustees, was recognized and made a motion that the Recommendation be adopted as amended by the Reference Committee with the further addition of the words "maternal transport" between the words "existing' and "program." The motion was seconded and carried.

Recommendation 3, as amended by the Reference Committee and the House, is printed below as adopted:

3. **The Maternal and Child Health Committee suggests that KMA recommend to the University of Kentucky that it investigate the problem of the maternal transport program for its region and establish a strong perinatal program, in view of the fact that it does not have an existing maternal transport program.**

Report of the
Committee on Medicare and Other Governmental Medical Programs

The Committee on Medicare and Other Governmental Medical Programs has continued to observe the mounting problems of the Medicare Program with considerable concern. The financial plight of Medicare has

been the subject of primary Congressional scrutiny through the budget reconciliation process. Although a number of relatively minor measures have been enacted to address many of the problems, little relief of a major nature has been seriously considered.

At the present time, it takes the contributions of four workers to support each beneficiary, and at its present course it is predicted that there will be two workers for every beneficiary by the middle of the next century. By the late 1990s, Part A funds will be exhausted, and there will be a $1 trillion debt by the year 2010.

The current causes for this trend relate to the fact that Medicare has become a pay-as-you-go entitlement process where the cost of services provided has far outstripped the contribution ratios considered adequate at the Program's beginning. There is a deteriorating worker-to-beneficiary ratio, no catastrophic protection, and no means testing for program eligibility.

As mentioned, the Congress and the Administration have reviewed many proposals for major relief, but none have been seriously considered. The actuarial, operational, and fiscal problems can be easily measured, and there have been many valid ideas developed. However, all solutions have called for increased taxes or reduced services and eligibility. The most obvious area of resolution, to restrict eligibility and provide benefits based on need, has not been confronted. This is an obvious political dilemma of major proportions. Although the majority of the nation's elderly are financially secure, they do not choose to relinquish services which they feel are their due after a lifetime of contributions.

In an unprecedented step, the American Medical Association has developed a plan for financing care for the elderly to replace Medicare. This plan calls for universal eligibility; catastrophic coverage for individuals and families after certain levels of out-of-pocket expenditures have been reached; insurance premiums based on ability to pay; a voucher system to purchase medical care, which will be processed through "approved" carriers or health plans; an IRA provision allowing contributions solely for medical care, which could be withdrawn tax-free at eligibility age; and an increase in eligibility age from 65 to 67, phased in over a three-year period.

One of the keys to the AMA plan is funding, which would be accomplished by replacing the 1.45% payroll tax on incomes up to $42,000 with a 1.75% tax on all gross incomes up to $100,000. This tax rate is higher than the existing rate, but lower than what would be required in the future if the current funding mechanism is maintained. It has been predicted that this funding method would provide reserves for future medical care costs, while paying for current costs at the present level.

Given the opposition by the AMA to the original Medicare discussions, this appears to be a radical change in direction. Although this might not have the universal support of all physicians, it is at least one comprehensive proposal to address Medicare shortcomings which does retain large elements of the free enterprise system.

A second major concern with Medicare, particularly among physicians, has been the freeze on physician reimbursement. The freeze was originally imposed by the Deficit Reduction Act of 1984 (the Budget Reconciliation Act of that year). The freeze went into effect on July 1, 1984, and was to remain in effect until September 30, 1985. Because of various extensions, the freeze actually lasted until April of this year, when a minor increase was allowed. Of current concern is reimposition of the freeze for fiscal year 1987.

Currently, the major Congressional Committees of jurisdiction, the House Committee on Ways and Means and the Health Subcommittee of the Committee on Energy and Commerce and the Senate Finance Committee, are considering a number of alternatives. Through intense lobbying by AMA, state medical associations, and others, the House Committee on Ways and Means voted on July 23, by a narrow margin, to end the freeze completely and allow an update in 1987 of 3% for physician reimbursement.

The reimbursement issue has had a significant effect on physician participation in Medicare. The AMA and KMA have encouraged physician participation, but on an individual patient basis related to patient need. The participation rate varies considerably from state to state, but the national average of physician participation is 28%. The lowest rate in the country is South Dakota with 6.9% participation, and the highest is Alabama with 63% of physicians who accept all assigned claims. Of the 487,000 physicians nationally who bill Medicare, 138,000 have signed participating agreements.

In other activities, the Administration had proposed an "inherently reasonable" fee rule which would have allowed the Health Care Financing Administration to reduce payments for so-called overpriced procedures. Among the procedures considered to be overpriced were cardiac bypass, pacemaker implantation, and cataract surgery. Again, through the intense lobbying efforts of the medical federation, this concept was abolished through the FY 87 budget reconciliation process.

The House of Delegates, in adopting Resolution D

(1985), requested that HCFA consider Kentucky a single payment area. Contact was made directly with HCFA, as well as through Congressional offices, to propose this request, and a reply was received stating that a study would be undertaken to determine the feasibility of this reimbursement process. The study has been delayed because of the many changes that have occurred and proposed changes relating to reimbursement, but this activity will be pursued further.

As discussed earlier, a number of proposals have been suggested to resolve Medicare's problems. It is suggested that these problems cannot be corrected because of the restrictions of the original Medicare law. The fast changes in Medicare's 20-year history in the areas of medical accomplishment, medical technology, and general public health, together with profound inflation, have rendered the program an inoperable relic.

The goals of Medicare can only be accomplished through creation of a different program which more practically addresses these factors. Nearly everyone is in agreement that the program must be dramatically changed, but there is no major support for any one proposal. The Committee can only suggest that physicians continue to render the highest quality of medical care to their patients, regardless of ability to pay.

James A. Baumgarten, M.D.
Chairman

Recommendations, Reference Committee No. 5:

Reference Committee No. 5 next considered the Report of the Committee on Medicare and Other Governmental Medical Programs. During discussion, new information was presented indicating that the Administration's proposal to enact an "inherently reasonable" fee rule allowing the Health Care Financing Administration to reduce payments for so-called overpriced procedures is being considered for future change by the House Ways and Means Committee, and the Health Care Financing Administration has notified some physicians of its intent to implement this measure.

Reference Committee No. 5 recommends that Report No. 35 be adopted.

Report of the
Committee on Community and Rural Health

The Community and Rural Health Committee met on one occasion during the year. The Committee reviewed the progress of its child abuse program. In 1985, the Committee developed a pamphlet entitled, "Recognizing and Reporting Child Abuse." That pamphlet, which was mailed to all physicians, hospitals, emergency centers, health departments, and others involved with treatment of children, has been a very successful PR project for the Association. The Governor, Martha Layne Collins; Lt. Governor, Steven Beshear; and Attorney General, David Armstrong, have written letters commending KMA for developing the pamphlet.

The Cabinet for Human Resources (CHR) has used the pamphlet in many of its programs. Just recently, we forwarded 800 copies to CHR, which were subsequently mailed to all day-care centers in Kentucky. The pamphlet presents a stark description of child abuse and neglect and explains obvious signs of abuse and neglect. The Committee recommends that KMA send copies of the pamphlet, "Recognizing and Reporting Child Abuse," to all public schools in the state in an effort to assist teachers in recognizing and reporting child abuse.

A representative from OSHA made an informal presentation to the Committee regarding first aid equipment which should be available at various plants, manufacturing companies, warehouses, etc. OSHA listed 12 basic supplies that should be contained in a first aid kit. Supplies listed included: triangular bandage (36" × 36" × 36"); stainless steel scissors; pen and paper (to record patient information); eye wash; ammonia inhalants; compress dressings; kling gauze; 4" × 4" gauze pads; adhesive tape; ice pack; and first aid instructional guide. These items are to be secured in their own container, sealed, inspected annually, and stored in an area of ready accessibility. In addition, the proposal requires the presence of certified personnel trained to render first aid.

The Committee reviewed the list and informally stated that the concept was good. The Committee did point out that if OSHA wanted an official statement from KMA regarding the kit, it would have to present a formal request to the Board of Trustees.

Kathy Cahill, Immunization Program Manager for the State of Kentucky, related some basic information regarding the Haemophilus Influenza/Type B (HIB) vaccine to the Committee. The HIB vaccine was licensed in 1985, with a recommendation that all children receive the HIB vaccine at 24 months of age. Children in nursery schools, day-care centers and kindergarten are more at risk in developing serious disease from HIB; therefore it may be appropriate to vaccinate children two to six years of age, and those 18 to 23 months, although the vaccine is less likely to be as effective in the latter age group.

According to Ms. Cahill, the HIB vaccine is considered fairly safe, and has a very low rate of side effects, with most side effects of a minor nature. The primary problem the Department of Health Services is having with the program is educating parents about the new vaccine and its importance.

The Committee was informed that in regards to immunization levels in Kentucky, 92% of required immunizations in the kindergartens were up-to-date. Eighty-eight percent were up-to-date in licensed day-cares, although documentation of immunization in day-cares is not always accurate. Rural areas are being provided vaccines for the medically indigent by the CHR. According to the CHR, there has been no litigation or claims regarding the DPT vaccine in Kentucky.

The potential liability problem of Health Departments immunizing children with runny noses, *etc*, was also mentioned. Ms. Cahill stated that if a child has a fever or other complications, vaccines should not be given; otherwise, it should be safe. Information to educate nurses in the Health Departments is being implemented, and nurses are undergoing in-service training with Health Department personnel throughout the state.

Hospitals throughout Kentucky are urged to develop a policy regarding immunizations for their staff. According to the Cabinet for Human Resources, only 35% of the hospitals in Kentucky presently have some kind of immunization policy.

At this time, Kentucky has no cases of measles. Physicians are urged to report any suspected cases to the Health Department.

Committee members were in agreement that obstetrical care in the rural areas has reached crisis proportions due to the withdrawal of government funds and the malpractice problem. According to physicians on the Committee, midwives are delivering many babies in rural areas and the practice is growing. The malpractice problem is having a devastating effect upon the rural areas where many OB-GYNs and family physicians have discontinued their obstetrical practice. The most directly affected persons are the indigent mothers who have no place to go. In many cases, family physicians, who have either dropped or severely limited their OB practice due to the insurance restrictions, are still occasionally called to the hospital for emergency deliveries.

Secondly, due to both health funding for indigent care and the liability crisis, the normal referral system in Kentucky has broken completely down. The ideal situation is to transfer the mother inutero to the tertiary hospital. However, many hospitals in urban areas are refusing transfers due to lack of funding, claiming that indigent funds must be spent on the local population. In addition, the beleaguered OB in the urban area whose malpractice insurance is already excessive, hesitates to accept extremely high-risk mothers for fear of potential lawsuits. The Committee believes that the low reimbursement rate of $102 should be addressed directly to top officials of CHR.

The Committee referred this matter to the KMA Board of Trustees. In addition, the KMA Committee on Maternal and Child Health has reviewed the same reports and is expected to present some recommendations.

Patricia Nicol, M.D., representative from the Department of Health Services in Frankfort, reported on the present infant mortality rates in Kentucky. She informed the Committee that Kentucky does not look good. Doctor Nicol recommended that KMA consider a study of infant deaths in the same manner as maternal deaths (Doctor Nicol was referring to the KMA Committee on Maternal Mortality). We recognize that there are some potential liability problems with establishing such a Committee and would refer this matter to the Board of Trustees for study and consideration.

Infant mortality should, according to Doctor Nicol, be looked at in groups of patients instead of individuals. She stated that infections were the primary cause of infant death (55 in Kentucky in 1984). Kentucky has the highest white teenage birth rate in the nation. According to Doctor Nicol, the CHR would like to become involved with physicians out in the communities to see what can be done about this problem. Most (73%) of the very low birth weight (less than 1500 grams) babies are born at Level I and Level III hospitals. However, in the group weighing less than 2500 grams, most (75%) are born at Levels I and II. The Committee recommended to the Board of Trustees that it seek to determine the reason for 39.7% of low birth weight infants plus 36% of very low birth weight infants being delivered in primary care hospitals. The Committee is of the opinion that, "if we know the reason, we can address the problem."

The members of the Committee have been very involved in the activities undertaken and we appreciate the opportunity to be of service to the profession.

Don R. Stephens, M.D.
Chairman

RECOMMENDATION:

1. The Committee on Community and Rural Health

recommends that KMA send copies of the pamphlet, "Recognizing and Reporting Child Abuse," to all public schools in the state in an effort to assist teachers in recognizing and reporting child abuse.

Recommendations, Reference Committee No. 5:

The Committee next considered the Report of the Committee on Community and Rural Health. The Committee recommends that the phrase "to be presented to teachers on in-service days early in the school year" be inserted in the third line after "state." The Recommendation will then read:

1. The Committee on Community and Rural Health recommends that KMA send copies of the pamphlet, "Recognizing and Reporting Child Abuse," to all public schools in the state, **to be presented to teachers on in-service days early in the school year** in an effort to assist teachers in recognizing and reporting child abuse.

Reference Committee No. 5 recommends that the Recommendation of Report No. 38 be adopted as amended.

Resolution K
Warren County Medical Society
Opposition to PRO Sanction Process

WHEREAS, the Indiana Peer Review Organization—Peerview—has contracted with Medicare to provide inpatient review services in the state of Kentucky, and

WHEREAS, the Peer Review Organization has the power to "sanction" physicians on the basis of the Organization's determination of "gross and flagrant violation of professional obligation," and

WHEREAS, such a sanction, which includes notification of local television and newspapers, may be placed before a hearing is held, now therefore be it

RESOLVED, that funds from the Kentucky Medical Association Legal Trust Fund be used to ensure that due process of law is afforded physicians involved in the sanctioning process, and be it further

RESOLVED, that if such surety cannot be obtained, then the Fund be used to seek a legal injunction against the imposition of sanctions.

Recommendations, Reference Committee No. 5:

Reference Committee No. 5 next considered Resolution K, Opposition to PRO Sanction Process, submitted by Warren County Medical Society. In discussion it was noted that the Peer Review Organization (PRO) does not have the authority to "sanction" physicians, but does have the authority to recommend sanctions to the Health Care Financing Administration. The Committee agrees with the intent of the Resolution and the concern expressed with the PRO sanction methods which circumvent legal due process. These methods include notification of television and newspapers of sanction proceedings before a hearing is held. However, the Committee offers the following substitute in lieu of Resolution K:

"RESOLVED, that the KMA pursue all appropriate channels to attempt to ensure due process of law is afforded physicians involved in the PRO Sanctioning process, and be it further

RESOLVED, that consideration be given to seeking legal relief through use of the Legal Trust Fund should such a channel be determined feasible."

Reference Committee No. 5 recommends that Substitute Resolution K be adopted.

Resolution S
Jefferson County Medical Society
Revised Standard HCFA-1500 Claim Form

WHEREAS, the Health Care Financing Administration (HCFA) has notified carriers that effective October 1, 1986, carriers must accept **assigned** claims submitted on the Standard HCFA-1500 Request for Medicare Payment Form **only**, and

WHEREAS, carriers are instructed to return **assigned** claims submitted on nonstandard HCFA-1500 forms to the physicians or suppliers with a notice that claims can be processed only on the standard HCFA-1500 (revised), and

WHEREAS, a revised (and HCFA-approved) version of the standard HCFA-1500 is available without charge from the various carriers—the cost of revising the office computers of all the medical offices across the nation to accept the revised format will be collectively astronomical and will put an unfair burden on the providers, especially in light of the fact that the new form does not alter the information required, but only places it in different areas of the form, now therefore be it

RESOLVED, that the KMA strongly opposes the revision of the standard form and asks that HCFA rescind its directive to its carriers to return claims submitted on the present standard form HCFA-1500 (4-80), and

allow the form approved by the AMA Council on Medical Service, the Health Care Financing Administration and CHAMPUS to continue as the accepted standard form for **all** submissions to Medicare.

Recommendations, Reference Committee No. 5:

Reference Committee No. 5 next considered Resolution S, Revised Standard HCFA-1500 Claim Form, submitted by the Jefferson County Medical Society, and recommends that the Resolved be amended by a change in wording and the deletion of all wording following "HCFA" in line two, so that the Resolved would read as follows:

> **"RESOLVED, that the KMA strongly opposes arbitrary revision of the standard forms used by HCFA."**

Reference Committee No. 5 recommends that Substitute Resolution S be adopted as amended.

Resolution V
Harold L. Bushey, M.D.
Kentucky Medical Assistance Program

WHEREAS, this House of Delegates adopted a position in 1983 that it could not support the present operation of the Kentucky Medical Assistance Program and encouraged each member to consider his or her relationship with the Medicaid Program individually, and

WHEREAS, this position was based on the constant addition of nonacute, nonprimary medical care services and the constant diminution of reimbursement for primary medical services, and

WHEREAS, this trend has continued throughout the intervening years and promises to maintain, now therefore be it

RESOLVED, that this House of Delegates reaffirm the position that KMA cannot support the present operation of the Kentucky Medical Assistance Program, nor can it encourage its members to participate in the Program, and be it further

RESOLVED, that each member consider his or her relationship with the Medicaid Program and determine the best method of fulfilling indigent medical care needs.

Recommendations, Reference Committee No. 5:

Reference Committee No. 5 considered Resolution V, Kentucky Medical Assistance Program, submitted by Harold L. Bushey, M.D., and recommends it be adopted.

Mr. Speaker, I recommend the adoption of the Report of Reference Committee No. 5 as a whole as amended.

I would sincerely like to thank the other members of the Committee: John Allen, M.D., Lexington; Lynn L. Ogden, II, M.D., Louisville; Scott Scutchfield, M.D., Danville; and Thomas R. Watson, M.D., Louisville, for their work. I would also like to thank Sharon Heckel for her assistance in the preparation of this Report.

REFERENCE COMMITTEE NO. 5

C. Dale Brown, M.D., Paducah, Chairman
John Allen, M.D., Lexington
Lynn L. Ogden, II, M.D., Louisville
Scott Scutchfield, M.D., Danville
Thomas R. Watson, M.D., Louisville

Editorial Note: Unless otherwise indicated, the Reference Committee action on each Report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.

REPORT OF REFERENCE COMMITTEE NO. 6
Dennis B. Kelly, M.D., Lexington
Chairman

Reference Committee No. 6 considered the following Reports and Resolutions:

42. Report of the Judicial Council
43. Report of the Rural Kentucky Medical Scholarship Fund
44. Report of the Physician-Attorney Liaison Committee
45. Report of the Membership Committee
47. Report of the McDowell House Board of Managers
48. Report of the KMA Medical Student Section
49. Report of the KMA Resident Physicians Section
    - Resolution G -Socioeconomic Education for Housestaff Physicians (Resident Physicians Section)
    - Resolution I -KMA Committee Structure (Fayette County Medical Society)
    - Resolution T -Ethical and Scientific Leadership (Jefferson County Medical Society)

Resolution X -Post-surgical Ophthalmological Care
(Fayette County Medical Society)

ITEMS FOR CONSENT

Reference Committee No. 6 reviewed the following items and recommends they be filed, by the consent of the House, without discussion:

42. Report of the Judicial Council - filed
43. Report of the Rural Kentucky Medical Scholarship Fund - filed
45. Report of the Membership Committee - filed
47. Report of the McDowell House Board of Managers - filed
48. Report of the KMA Medical Student Section - filed
49. Report of the KMA Resident Physicians Section - filed

Reference Committee No. 6 would like to express its appreciation to the Committee members and Chairmen for the time and effort spent in gathering information for the House of Delegates.

Report of the Judicial Council

The Judicial Council has met every two months this Associational year. The majority of issues dealt with involved patient complaints.

In this regard, the Council sees itself as a third-party arbiter between physicians and patients and, as such, serves a very vital role. Grievance resolution outside the legal system is felt to be a genuine service, both to the patients and physicians. In this capacity, the Council has been able to help bring solutions to problems that very often stem from a simple lack of communication. At the same time, the Council continues to serve as a source for determination of the propriety of physicians' behavior and ethical matters. A review of all of the Council's activities would be inappropriate due to space limitations, but consideration of some issues is appropriate.

The Council upheld the action of a county medical society in the expulsion of a member because of a licensure violation. In accordance with the Constitution and Bylaws, the Council is obliged to automatically expel any member convicted of a felony or one who has undergone final licensure revocation.

In one case involving a patient complaint, the Council has spent the entire year investigating the issue from a medical and ethical standpoint, as well as from the perspective of both the patient and the physician. The complaint involved allegations of improper care, and the Council, during its investigation, was required to conduct meetings with the patient and the physicians, seek advice from the local Trustee and special consultants, and review hospital records. It was finally determined that improper care was not rendered. The patient ultimately was not satisfied because of a lack of rapport with the physician.

The Council reviewed a complaint referred from the Physician Review Advisory Committee of the Board of Medical Licensure regarding the inappropriate performance of surgery in the face of a life-threatening secondary medical condition. Upon a very detailed investigation, it was found that the surgeons involved had taken adequate and appropriate prophylactic measures prior to the performance of surgery, and when it was determined that the patient was in distress, resuscitation was begun quickly. The patient's relatives were not fully aware of all of the medical considerations in the case and were referred for full consultation with the attending surgeons.

In another case, a patient had complained that a physician had made excessive charges for tests prior to surgery, and the patient was not fully convinced that surgery was indicated. An intensive review, along with consultations, produced the finding that justification for the testing procedures was questionable and the fees charged were excessive.

In another case that developed from a patient complaint alleging improper care, the Council was required to, again, conduct a detailed review, which determined that no inappropriate care was rendered. The Council finally dismissed the case when the complainant sought monetary restitution.

In addition to cases referred from the Board of Licensure, the Council also considered matters referred from the Claims and Utilization Review Committee. These cases involved questions of routinely charging excessive fees, as well as questionable medical practice patterns. Other cases reviewed involved inappropriate patient solicitation by physicians, excessive fees, and inappropriate care. The Council also was asked for opinions concerning the provision of an itemized statement for care rendered before the physician's bill was paid. The Council would like to reiterate its long-standing position that withholding itemized statements in these situations is not proper.

The Council also developed a position on the prescription of anabolic steroids for use by athletes. It was

determined that this practice was unethical, which confirms a similar position held by the AMA Council on Ethical and Judicial Affairs. The Board of Trustees was informed of this position, which was transmitted to the Board of Medical Licensure. The proscription on prescription of anabolic steroids for this use is now a state licensure regulation.

The term of Council member Harold L. Bushey, M.D., Barbourville, expires this year, and the Council has unanimously recommended to the Board of Trustees that Doctor Bushey be nominated to succeed himself. This appointment is made by the House of Delegates, and the Council urges the House's favorable consideration of its recommendation.

The Council continues to work with the best interests of the profession and our patients in mind, and appreciates the trust given it. As Chairman, I would like to thank all of the members for their long, devoted, and concerned input.

Earl P. Oliver, M.D.
Chairman

Report of the Rural Kentucky Medical Scholarship Fund, Inc.

This year, 1986, marks the 40th Anniversary of the Rural Kentucky Medical Scholarship Fund, Inc. The first meeting of the Fund was held at the Brown Hotel in Louisville on December 12, 1945. The first recipients entered medical school in August, 1946. The amount of each loan was $500 to $1,000 and the rate of interest was 2%. At the present time, the amount of the loans is $6,000 per year, and the rate of interest is one-half of prime or 4.25%.

Henry S. Spalding, M.D., Bardstown, Kentucky, was Chairman of the Fund from 1981 until 1986. Doctor Spalding resigned as Chairman, and Carolyn H. McKinley, M.D., Glasgow, was elected the new Chairman. Doctor McKinley's father, C. C. Howard, M.D., served as the first Chairman of the Fund until his death in 1971.

At the Annual Meeting on May 15, 1986, 13 new scholarship loans and 12 renewals were approved. Currently, there are 24 recipients in residency training, and 10 additional residency programs were approved this year. Eight scholarship recipients are entering practice in 1986. There are 273 past recipients practicing in 94 counties in Kentucky. Eight recipients received total forgiveness of one loan for practicing in a critical county this year, and two received partial forgiveness.

Over the past 40 years, the Fund has loaned a total of $3,000,000 to 512 medical students and has proven to be a successful aid in securing physicians for rural areas. Seven members of the Board were presented with citations in recognition and appreciation for their faithful service for 14 years and longer. The continued assistance and support of the Kentucky Medical Association and the dedication and perseverance of the members of the Board of Directors have contributed to the success of the Fund.

Carolyn H. McKinley, M.D.
Chairman

Report of the Membership Committee

The Membership Committee during the past year has directed a comprehensive plan for the recruitment and retention of practicing physicians, residents, and students in Kentucky. Activities to increase membership for 1986 began just prior to last year's Annual Meeting and have included direct mail, peer-to-peer efforts, and various promotional techniques.

As a means of background, at the end of 1985 KMA members totaled 4,686 in all categories, a 6.4% increase over 1984 figures. Total dues-paying membership (Active, In-Training, Associate, and Inactive) was up 1.8%, for a gain of 67. However, the number of "Active" members increased by only one over the previous year. Although recruitment efforts netted 327 new members in 1985, KMA experienced a loss of 260 dues-paying members due to a number of reasons:

73 - Changed from Active to Life (up 15% over 1984)
78 - Moved out of state
21 - Active members died
8 - Became ineligible due to Licensure problems
80 - Did not renew for 1985

These figures reinforce our belief that membership development must be a continuing and ongoing effort of the Association and that we must strive to retain current members and attract our nonmember colleagues through a strong recruitment program.

Direct Mail

Once again, the major activity in our recruitment efforts has been in the form of direct mail campaigns with 20 separate mailings to various segments of the nonmember population. Several of the mailings were targeted to specific groups; *ie*, residents and students, as well as to certain counties where membership is extremely low. The Committee acknowledges the help

of Jerry W. Martin, M.D., KAFP President, who wrote to all nonmember family physicians, urging them to join organized medicine.

Overall, 735 nonmembers responded to our mailings and 79% of those who expressed an interest in the Association did join. An analysis of each of the mailings was done and will provide the basis for future activities.

Peer-to-Peer

The Committee feels strongly that, to be effective, these efforts must be supported and supplemented with personal contact by the general membership. With that in mind, a number of peer-to-peer activities were incorporated into the membership plan, beginning with an informal House of Delegates outreach program instigated at the 1985 Annual Meeting. The Committee appreciates those Delegates who requested lists of the nonmembers in their counties. It was determined that eight new members joined as a result of contacts made by the Delegates. It is hoped that more Delegates will become involved in encouraging their nonmember colleagues to be a part of this Association.

Once again, several members of KMA's Executive Committee took part in a Phonathon in April to call members who had not renewed their membership for 1986. Doctors Wally O. Montgomery, Richard F. Hench, Nelson B. Rue, and Donald C. Barton talked with 54 physicians, 60% of whom indicated they would renew. Although the results of this Phonathon were not as high as last year's, the Committee still feels that it has a positive effect on membership retention, as many of those contacted expressed their appreciation for the opportunity to talk with their leaders of the Association.

A statewide peer-to-peer Membership Recruitment Campaign has been conducted this summer by KMA's Alternate Trustees. Using the theme, "Making Our Voice 5,000 Strong," goals were set in each of KMA's 15 Districts to increase membership by 5%. The Alternate Trustees (or a designate) were encouraged to contact every nonmember physician in their District—either by telephone, mail or personal contact. Results of the Campaign, which ran from June 1 to September 15, will be announced at the 1986 Annual Meeting and those Districts meeting their goals will be recognized.

Other Recruitment

The Membership Committee sponsored its third "Preparing for Private Practice Workshop" in November of 1985 as a new member benefit for young physicians. Overall, more than 75 physicians, spouses and office managers have attended the three sessions, which have resulted in 22 new members. We feel this program has been very beneficial not only for the participants who have continually given it favorable evaluation, but also for recruitment and retention of the young physician.

Since the establishment by the House of Delegates of the KMA Resident Physicians Section in 1984, In-Training membership has experienced tremendous growth. As of June 15, 1986, resident membership was up almost 60% over last year. Over 100 new residents were recruited during the House Staff Orientations last year and KMA was represented at this year's Orientations by Charles S. Smith, Jr., M.D., at the University of Louisville, and Preston P. Nunnelley, M.D., at the University of Kentucky.

A major area of concern of the Committee has been the low participation by academic physicians at the University of Kentucky. Currently, only 43% of the UKMC faculty belong to KMA, compared with 80% of the U of L medical faculty. In direct relation, membership at the resident and student levels is also significantly lower at UKMC. In this regard, we have developed an academic physician brochure to use in recruitment mailings and are working with the UKMC leadership to increase support for organized medicine.

In a similar fashion, the Committee has targeted counties where membership is extremely low. KMA President-Elect Richard F. Hench, M.D., spoke to the medical staff at Clark County Hospital to encourage more participation by physicians in that area. Alternate Trustees are also making efforts to attend hospital medical staff meetings around the state to explain the purposes and benefits of belonging to organized medicine.

The Committee would like to also recognize the officers and staff of the Fayette and Jefferson County Medical Societies who have undertaken a number of activities during the past year to build membership. The leadership of the Fayette County Medical Society conducted a nonmember phonathon in November of 1985 and the results from this effort are beginning to show in the form of new members. The Jefferson County Medical Society did several recruitment mailings and invited all nonmembers to a Society meeting in February dealing with the professional liability issue. Results of these activities have produced a 4% increase in JCMS Active members. In addition, both societies have participated in resident and student recruitment. The Committee wishes to applaud these accomplishments in the

area of membership development and encourage their continued support.

Future projects of the Committee include responsibility for a special issue of the *Journal of the KMA* emphasizing membership in organized medicine. A number of KMA members, representing various segments of the physician population, are contributing articles for the issue, which will be published in October.

Recruitment and retention results have been encouraging this year. As of June 30, 1986, we have gained 353 new members compared with a total of 327 new members for all of 1985. Similar increases are noted below:

Membership Category	# as of 6/30/86	# as of 12/31/85
Active	3480	3424
In-Training	231	179
Total Dues-Paying	3945	3832
Total KMA All Categories	4895	4686

Our largest membership increases have been with residents and physicians in their first year of practice. We feel the growth in the number of young physicians will have a significant long-term effect on the Association.

On behalf of the Committee members, we wish to thank all the physicians who have participated in personal recruitment and urge others to become involved in these efforts. As Teddy Roosevelt once said, "Every person owes part of their time and money to the business or industry in which they are engaged. No person has a moral right to withhold support from an organization that is striving to improve conditions within his sphere."

Harold D. Haller, Sr., M.D.
Chairman

Report of the McDowell House Board of Managers

Your KMA McDowell House Board of Managers is pleased to report the culmination of the James Graham Brown Permanent Endowment Fund Drive for the McDowell House with the receipt of cash and pledges totaling $126,593.33, considerably above the goal required for the matching Brown Foundation Grant of $50,000. This successful drive reflected the dedicated time and energies of members of the Board of Managers; the KMA; the KMA Auxiliary; and interested individuals and organizations throughout Kentucky, most particularly Danville. Especially noteworthy were the sustained determination and leadership of the McDowell House staff who directed this campaign from cramped quarters and with the bare minimum of office support facilities for such an undertaking. To all of these go our most special thanks.

The first annual McDowell/Crawford Ball was an epochal, opening event for the Annual Meeting of the KMA and served to raise $5,437 for the permanent fund drive. Plans are now underway for the second annual ball to be held Sunday evening, September 21, 1986, at the Embassy Room of the Hilton East, again with the expectation of a gala affair.

Considerable improvement to the home and garden was completed during the recent year. Most noble were the rebuilding of the 12-foot brick wall demolished in April 1984, and which now serves again to enclose the Apothecary Garden, and the long-needed replacement of the front wood fence with an authentic period picket fence. New tree replacements for recent tree losses have been well received and, hopefully, will be memorialized or sponsored by interested persons. Considerable efforts by volunteers and a new part-time employee have spurred work in the needy garden area. Decent volunteer help has enhanced the House tours this year.

Though much has been accomplished, there are recognizable needs for the future, such as restructure of the Bylaws, Rules and Regulations by which the Board manages the McDowell House and Apothecary Shop, which is long overdue. A more formal structuring of our Board of Managers is envisioned as part of these changes. Other needs, such as improved insurance for employees and better house liability insurance coverage, will be assessed in the coming year. Likewise the acquisition, by donation hopefully, of a small office computer with word processor and printer, would facilitate more efficient office operation of many business activities required to maintain the McDowell House and Apothecary Museum.

Francis Massie, M.D., of Lexington, long-time Chairman of the Board of the McDowell House, died last fall after a protracted illness. His accomplishments, not only for the McDowell Home, but for state and national surgical institutions, were prodigious.

The Chairman gratefully acknowledges the time and energies devoted by members of the McDowell House Board of Managers and staff, as well as the confidence and support of the KMA Board of Trustees during the past year.

David W. Kinnaird, M.D.
Chairman

Report of the Medical Student Section

The KMA Medical Student Section currently represents 58 % of the students in Kentucky's two medical schools. Membership stands at 507, with 78% of the students at the University of Louisville School of Medicine belonging to KMA and 28% of the University of Kentucky College of Medicine students as members.

The Section sent Delegates to both the Interim and Annual Meetings of the American Medical Association during the past year. Representing the Section at the Interim Meeting were Carlene Slucher (U of L) and Robin Peavler (U of K). Activities of the session had a legislative overtone and of the five Resolutions sent to the AMA House of Delegates from the MSS, four were adopted.

The KMA-MSS was represented by Gary L. Reasor (U of L) at the 1986 AMA-MSS Annual Meeting held June 13-15 in Chicago. The theme of the meeting was "Hunger in America" and a number of Resolutions addressed this issue. Other MSS Resolutions, forwarded to the AMA House for consideration, dealt with the Guaranteed Student Loan program, socioeconomic and medical ethics education for medical students, and tobacco issues.

A number of medical students have served during the past year as members on KMA committees and have had direct input in several areas of Association work; *ie*, physician manpower, emergency medical care, and youth education. We appreciate the opportunity to be involved in these areas and to have a voice in organized medicine.

Gary L. Reasor, U of L Delegate
Joseph A. Kelchak, U of K Delegate

Report of the Resident Physicians Section

The KMA Resident Physicians Section has experienced tremendous growth since its establishment by the KMA House of Delegates in 1984. In-Training membership as of June 30, 1986, stands at 231, a 60% increase over this time last year. The Section today represents about 30% of the resident population in Kentucky.

Created to provide a forum for resident physicians to become involved in decision-making processes of organized medicine, the KMA-RPS was well represented during the 1985 KMA Annual Meeting. Among the six KMA-RPS Resolutions adopted by the House of Delegates at that time were two calling for restrictions in tobacco advertising and in smoking areas. Both of these were submitted to the AMA-RPS in December by Kentucky's Resident Delegate, incorporated with other Resolutions, and eventually adopted as AMA policy. The KMA-RPS was also represented at the 1986 AMA-RPS Annual Meeting in June.

The Governing Council held its organizational meeting on February 24 and elected officers for the coming year. A major priority of the Section has been to make the KMA-RPS more visible and to encourage membership. To that effect, programs of interest to residents will be held on campus, rotating among the training programs.

At the writing of this report, plans are being finalized for a residents' program to be held at the University of Kentucky on August 13, 1986. This meeting will represent the Second Annual Meeting of the KMA-RPS and will deal with malpractice concerns of the resident physician.

An enthusiastic response was received at the House Staff Orientations held at the University of Louisville and the University of Kentucky in June. Over 100 residents applied for In-Training membership at the state and county level.

On behalf of the members of the KMA-RPS Governing Council, I would like to thank the House of Delegates and individual members of KMA for their support and encouragement. As physicians-in-training, we appreciate the opportunity to have a voice in issues affecting the future of our profession.

R. Mont Wood, M.D.
KMA-RPS President

END OF CONSENT CALENDAR ITEMS

Report of the Physician-Attorney Liaison Committee

The joint Physician-Attorney Liaison Committee of the Kentucky Bar Association and the Kentucky Medical Association met formally on one occasion during the year. Committee membership has varied over the past 10 years, and the Committee adopted the following recommendation:

> The Committee should be limited to six members from each profession. A quorum would be 50% attendance (or six members) with a requirement that at least one member of each of the two profes-

sions be present at any meeting in which action is taken.

During the year, we received four complaints and all were reviewed during the meeting. Three complaints were submitted by attorneys who objected to the physician charges for deposition. While the Committee does not specifically review fees, it does encourage that they be reasonable. In every instance, communication had not taken place between the physician and the attorney regarding the fees. The Committee referred the parties involved to Section VI of the Interprofessional Code which states:

> It is impractical to establish precise rules governing a physician's fees for medical reports, reviewing medical records, conferences, opinions, depositions, court appearances, copies of medical records and other services. It is important, however, that fees be reasonable and that they be discussed in advance by the physician and the attorney. In this way, the major cause of misunderstanding and dissatisfaction will be eliminated. Generally, the attorney who requests these services of a physician is primarily responsible for prompt payment of the physician's reasonable fees. Under no circumstances may a physician charge a fee for such services which is contingent upon the result of the lawsuit.

The final complaint concerned the refusal of an attorney to reimburse a physician for a deposition. The physician informed the attorney that a deposition would be scheduled upon receipt of the fee. The attorney then obtained an Order for a Personal Appearance and the deposition was taken. The attorney stated, "It is my intention to take his (physician's) deposition in accordance with the Kentucky Rules of Civil Procedure and pursuant to Court Order requiring his attendance here today."

The Committee unanimously adopted a position that the physician was entitled to reasonable compensation for serving as an expert witness and cited to both parties the portion of Section VI of the Interprofessional Code relating to this matter:

> As a matter of policy, an attorney should not request a physician to testify on deposition or in court, nor should he subpoena him, without making arrangements for reasonable compensation. This is not required by law, but is suggested as a matter of fairness and cooperation between the professions. A physician should be compensated for the time spent away from his professional practice, regardless of whether he is used as a witness.

Following a review of the Interprofessional Code, it was noted that there was a typographical error in Section VII, A., of the Code. This error should be corrected in the next appearance of the Interprofessional Code in the *KMA Journal*.

VII. COMPENSATION FOR MEDICAL TREATMENT TO THE PATIENT

> A. The patient, not his attorney, is responsible for paying all bills incurred by the patient for his medical care. While bills should be sent to the attorney on the attorney's request, this does (not) make the attorney responsible for their payment.

We recommend that the Interprofessional Code be printed in the *Journal of the Kentucky Medical Association* on a biennial basis. Many physicians are unaware of the Code and the functions of the Committee.

In most cases, differences between the professions can be resolved if the parties are familiar with the Code and if complaints are channeled through the Committee.

Finally, a discussion was held regarding the merits of establishing a liaison committee of the Kentucky Bar Association and the Kentucky Medical Association whose purpose would be to address the liability problems of the professions. The members noted that both professions are suffering and will continue to suffer because of the pervasive and complex nature of the liability problem.

The joint Committee recommends that the leadership of KMA and KBA meet to discuss the professional liability problem in Kentucky and consider the formation of a joint committee to address this issue.

Special thanks go to all the members of the joint Committee for their fairness and participation in the fulfillment of the Committee's objectives as set forth in the Interprofessional Code.

Thomas M. Marshall, M.D.
Chairman

RECOMMENDATIONS:

1. The Physician-Attorney Liaison Committee recommends that the Interprofessional Code be printed in the *Journal of the Kentucky Medical Association* on a biennial basis.
2. The Physician-Attorney Liaison Committee recommends that the leadership of KMA and KBA

meet to discuss the professional liability problem in Kentucky and consider the formation of a joint committee to address this issue.

Recommendations, Reference Committee No. 6:

Reference Committee No. 6 considered the Report of the Physician-Attorney Liaison Committee and recommends that Recommendation No. 1 of the Committee be adopted.

With regard to Recommendation No. 2, the Reference Committee felt that any action in the area of professional liability be adopted within the framework of the activities of the Ad Hoc Committee on Professional Liability. The Reference Committee recommends that Recommendation No. 2 be referred to the Board of Trustees.

Resolution G
KMA Resident Physicians Section
Socioeconomic Education for Housestaff Physicians

WHEREAS, the public expects physicians to practice cost effective and ethical medicine and to be prepared to deal with economic, legal, and moral issues, and

WHEREAS, an adequate education in these areas is usually not obtained during medical school or residency training, and

WHEREAS, most physicians entering practice for the first time are unprepared to deal with many of the socioeconomic issues they face, and

WHEREAS, the American Medical Association is directing its representatives to the Accreditation Council for Graduate Medical Education to urge the prompt development of programs to insure education in the socioeconomics of health care in all accredited residency programs, therefore be it

RESOLVED, that the Kentucky Medical Association encourage residency programs in the state to consider the development of programs for housestaff physicians on medical socioeconomics.

Recommendations, Reference Committee No. 6:

The Committee next discussed Resolution G, Socioeconomic Education for Housestaff Physicians, submitted by the KMA Resident Physicians Section. It was recommended that the following wording be added to the Resolved portion: "and that KMA offer such assistance as appropriate in the development of such socioeconomic programs, if requested." The amended Resolved would then read:

"RESOLVED, that the Kentucky Medical Association encourage residency programs in the state to consider the development of programs for housestaff physicians on medical socioeconomics **and that KMA offer such assistance as appropriate in the development of such socioeconomic programs, if requested.**"

Reference Committee No. 6 recommends that Resolution G be adopted as amended.

Resolution I
Fayette County Medical Society
KMA Committee Structure

WHEREAS, the Kentucky Medical Association committee structure is cumbersome and has not been updated for many years, therefore be it

RESOLVED, that the 1986-87 President of the Kentucky Medical Association appoint an ad hoc committee to review the KMA committee structure and present suggested revisions to the 1987 House of Delegates.

Recommendations, Reference Committee No. 6:

Reference Committee No. 6 next considered Resolution I, KMA Committee Structure, submitted by the Fayette County Medical Society. The Committee offers the following substitute Resolution:

"RESOLVED, that the Board of Trustees undertake a review of the committee structure and report its findings to the 1987 House of Delegates."

Reference Committee No. 6 recommends that Substitute Resolution I be adopted.

Resolution T
Jefferson County Medical Society
Ethical and Scientific Leadership

WHEREAS, the Kentucky Medical Association and Kentucky physicians have always supported the highest professional standards, and

WHEREAS, the Kentucky Board of Medical Licensure is aiding in the quest to enforce those high standards held by all of us, and

WHEREAS, it is the goal of our organization to hold the medical profession of Kentucky as a national leader in ethical and scientific standards and above mediocrity, now therefore be it

RESOLVED, that the Kentucky Medical Association

Trustees charge the Judicial Council to actively aid the Board of Medical Licensure to support the highest degree of professionalism in the nation, and be it further

RESOLVED, that these efforts be reviewed by qualified observers and be disseminated to the membership and the public on a periodic basis.

Recommendations, Reference Committee No. 6:

The Committee considered Resolution T, Ethical and Scientific Leadership, submitted by the Jefferson County Medical Society. The Committee recommends that the second Resolved be amended by deleting the words, "be reviewed by qualified observers and" and the words, "and the public." The second Resolved would then read as follows:

> **"RESOLVED, that these efforts be disseminated to the membership on a periodic basis."**

Reference Committee No. 6 recommends adoption of Resolution T as amended.

Resolution X
Fayette County Medical Society
Post-surgical Ophthalmological Care

WHEREAS, nonphysicians are practicing medicine through legislative means without the benefit of medical school or hospital training, and

WHEREAS, the general public does not clearly understand the differences between a physician and a nonphysician and is not aware of the fact that nonphysicians have had no formal medical school or hospital training, and

WHEREAS, potentially blinding diseases and post-surgical care require the highest level of skill and observation by medical school and hospital-trained physicians, now therefore be it

RESOLVED, that the Kentucky Medical Association ask the Kentucky Board of Medical Licensure to mandate that all post-operative eye surgical patients be followed during the post-operative period for three months by the operating surgeon or a designated ophthalmologist and punish offenders by suspension of license.

Recommendations, Reference Committee No. 6:

Reference Committee No. 6 next considered Resolution X, Post-surgical Ophthalmological Care, submitted by the Fayette County Medical Society. Considerable testimony was heard on this Resolution. There was a strong consensus that it was inappropriate for independently practicing nonphysicians to be directly responsible for the post-operative care of surgical eye cases. Further testimony indicated that this could be occurring in Kentucky.

Reference Committee No. 6 recommends that the following substitute wording be adopted in place of the existing Resolved:

> **"RESOLVED, that the KMA Board of Trustees ask the Board of Medical Licensure to consider whether or not it is appropriate to refer patients for post-operative eye care to nonphysicians in the Commonwealth of Kentucky."**

Reference Committee No. 6 recommends that Substitute Resolution X be adopted.

The motion was seconded from the floor. Nelson B. Rue, M.D., Chairman of the Board of Trustees, was recognized and made a motion on behalf of the Board that Resolution X and Reference Committee Substitute X be rejected. Considerable discussion ensued from the floor, and on a call for the vote, the motion proposed by Doctor Rue was defeated.

On a call for the question, Reference Committee Substitute X was adopted.

Mr. Speaker, I recommend the adoption of the Report of the Reference Committee No. 6 as a whole.

Mr. Speaker, I would like to personally thank the members of the Reference Committee for their interest, time, and help on the issues discussed and formulation of this report. Members of the Committee were: James R. Cundiff, M.D., Shepherdsville; Samuel J. King, M.D., Pikeville; John McClellan, Jr., M.D., Henderson; and Anne W. Winterland, M.D., Louisville. I would also like to thank Diane Maxey for her assistance in preparing this report.

REFERENCE COMMITTEE NO. 6
Dennis B. Kelley, M.D., Lexington, Chairman
James R. Cundiff, M.D., Shepherdsville
Samuel J. King, M.D., Pikeville
John W. McClellan, Jr., M.D., Henderson
Anne W. Winterland, M.D., Louisville

Election of Officers

Paul J. Sides, M.D., Lancaster, Chairman of the Nominating Committee, presented the slate of nominees for general officers and for AMA Delegates and Alternate Delegates, and each was elected by acclamation, with the exception of the Office of Vice Speaker, House

of Delegates, which was elected by secret ballot. The nominee selected is indicated by an asterisk.

President-Elect	Donald C. Barton, M.D. Corbin
Vice President	Thomas R. Watson, M.D. Louisville
Speaker, House of Delegates	Peter C. Campbell, Jr. M.D., Louisville
Vice Speaker, House of Delegates	*Danny M. Clark, M.D. Somerset John E. Trevey, M.D. Lexington
Delegate to the AMA (January 1, 1987 to December 31, 1988)	Kenneth P. Crawford, M.D., Louisville
Delegate to the AMA (January 1, 1987 to December 31, 1988)	Russell L. Travis, M.D. Lexington
Alternate Delegate to the AMA (January 1, 1987 to December 31, 1988)	Robert R. Goodin, M.D. Louisville
Alternate Delegate to the AMA (January 1, 1987 to December 31, 1988)	Carl Cooper, Jr., M.D. Bedford

Doctor Sides then submitted the following nominations for the offices of Trustee and Alternate Trustee on behalf of the District nominating committees:

1st District Trustee	John D. Noonan, M.D. Paducah
1st District Alternate	James S. Gwinn, Jr., M.D. Paducah
3rd District Trustee	J. Nicholas Terhune, M.D. Hopkinsville
3rd District Alternate	N. H. Talley, M.D. Princeton
4th District Trustee	Lucian Y. Moreman, II, M.D., Elizabethtown
4th District Alternate	Salem M. George, M.D. Lebanon
12th District Trustee	David C. Liebschutz, M.D. Danville
12th District Alternate	Scott B. Scutchfield, M.D. Danville
14th District Trustee	James R. Pigg, M.D. Pikeville
14th District Alternate	Deborah L. McIntyre M.D., Hazard

A motion was made, seconded and carried that the above slate of nominees be elected.

The new President-Elect was escorted to the podium by Past Presidents Delmas M. Clardy, M.D. and Paul J. Parks, M.D.

Election of 1987 Nominating Committee

The following physicians were elected by the House of Delegates to serve as the Nominating Committee at the 1987 Annual Meeting:

Sally S. Mattingly, M.D., Lexington, Chairman
Alvin M. Churney, M.D., Louisville
John E. McCracken, M.D., Paducah
Deborah L. McIntyre, M.D., Hazard
James O. Willoughby, M.D., Bowling Green

It was announced that the Board would hold a reorganizational meeting on Thursday at noon.

Doctor Campbell adjourned the 1986 Session of the House of Delegates at 9:15 p.m.

1986 CONSTITUTION AND BYLAWS OF THE KENTUCKY MEDICAL ASSOCIATION

CONSTITUTION

Article I. Name of the Association
Article II. Purpose of the Association
Article III. Component Societies
Article IV. Composition and Meetings of the Association
Article V. Officers
Article VI. House of Delegates
Article VII. Districts, Sections and District Societies
Article VIII. Board of Trustees
Article IX. Funds and Expenses
Article X. Referendum
Article XI. The Seal
Article XII. Amendments
Article XIII. Definitions

Article I. Name of Association

The name and title of this organization shall be the Kentucky Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge; the advancement of medical science and charity; the evaluation of the standards of medical education; the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and the guarding and fostering of their material interests; the protection of the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

Article IV. Composition and Meetings of the Association

The Association shall consist of the members of the component societies, but the House of Delegates shall have authority to adopt such bylaws regulating the admission and classification of members as it may deem advisable. The Association shall hold an Annual Meeting and such Special Meetings as may be called pursuant to the bylaws.

Article V. Officers

Section 1. The officers of this Association shall be a President, a President-Elect, a Vice-President, a Secretary-Treasurer, a Speaker and Vice-Speaker of the House of Delegates, a Trustee and an Alternate Trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

Section 2. The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the House of Delegates at its Regular Session and shall take office on the last day of the Annual Meeting.

Article VI. House of Delegates

Section 1. The House of Delegates shall be the legislative body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt bylaws to carry out the provisions of this Constitution and to provide for the government of the Association in any other manner not inconsistent with this Constitution. It shall meet in Regular Session, annually during the Annual Meeting of the Association, and may be called into Special Session under such conditions as may be prescribed in the bylaws.

Section 2. Delegates shall be members of and elected by component county societies in such a manner as may be provided in the Bylaws. Officers of the Association, Delegates and Alternate Delegates of the American Medical Association and five immediate Past Presidents shall be the ex-officio members of the House of Delegates and entitled to vote. All other Past Presidents and Vice-Presidents and Past Chairmen of the Board of Trustees shall be ex-officio members of the House. They shall have the right to speak and debate on the floor of the House but shall not have the right to make a motion, introduce business or an amendment, or vote.

Section 3. The House of Delegates shall elect a Speaker and a Vice-Speaker, one of whom shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

Article VII. Districts, Sections and District Societies

The House of Delegates shall divide the state into Districts composed of one or more counties, for administrative purposes. It may also provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such District Societies, composed exclusively of members of component societies, as will promote the best interests of the profession.

Article VIII. Board of Trustees

The House of Delegates shall make provision in the bylaws for a Board of Trustees composed of one Trustee from each District and such of the other officers of the Association as the House may deem appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable, provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

Article IX. Funds and Expenses

The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession.

Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before the House of Delegates. The Secretary-Treasurer, upon the presentation of such a petition to him shall cause the question to be submitted to the active membership by mail, and if a majority of the active members shall signify its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary-Treasurer to the President and Board of Trustees.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Regular Session, provided that such amendment shall have been presented in open meeting at the previous regular session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

Article XIII. Definitions

Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

(a) "County society," "component county society," or "component medical society" means "component society."

(b) "Annual Meeting" means the annual three-day meeting of the Association.

(c) "Scientific Sessions" mean those sessions during the Annual Meeting at which scientific subjects are programmed and discussed.

(d) "Regular Session" means the regular session of the House of Delegates which is held during the Annual Meeting.

(e) "Special Session" means a special, called meeting or session of the House of Delegates.

BYLAWS

Chapter I. Membership
Chapter II. Annual and Special Meetings of the Association
Chapter III. The House of Delegates
Chapter IV. Election of Officers
Chapter V. Duties of Officers
Chapter VI. Board of Trustees
Chapter VII. Discipline-The Judicial Council
Chapter VIII. Standing Committees and Councils
Chapter IX. Assessments and Expenditures
Chapter X. Rules of Conduct
Chapter XI. Rules of Order
Chapter XII. County Societies
Chapter XIII. Amendments

CHAPTER I. MEMBERSHIP

Section 1. Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary-Treasurer as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary-Treasurer of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship. And provided further, that the Judicial Council, after a hearing, shall have power to condition membership in this Association upon the physician's agreement to limit the scope of his practice in any manner reasonably calculated to protect the public from the adverse effects of any demonstrated frailty or disability of said member.

Section 2. Membership in the Association shall be divided into nine classes, to-wit: Active, Life, In-Training, Associate, Inactive, Student, Service, Honorary and Special.

(a) Active Members. The active membership of the Association shall consist of the active members of the various component medical societies. To be eligible for active membership in any component society, the applicant must be a physician who holds an unrestricted or limited license to practice medicine and surgery in this state, and who is of good moral, ethical and professional standing. Nothing contained herein shall prevent a component society from requiring new members to occupy provisional status for a reasonable time after their admittance to membership under any classification.

(b) Life Members. Component societies may elect as a life-member any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from active practice. Life members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive *The Journal* and other publications of the Association.

(c) Resident Physicians Section. Doctors of medicine or osteopathy who have complied with all pertinent regulations of the Kentucky Board of Medical Licensure and who are serving in AMA approved training programs in Kentucky shall be eligible for membership in the Resident Physicians Section of the Kentucky Medical Association. The Resident Physicians Section shall be governed by its own Constitution and Bylaws, which shall not be in conflict with the Constitution, Bylaws and Board policies of the parent Kentucky Medical Association. Should any questions arise regarding the existence of a conflict, the KMA Board of Trustees shall be the final arbiter of such questions. In-Training members in good standing shall have the right to vote and receive all publications of the Association. In-Training members shall not be counted in determining the number of delegates to which their county society is entitled in the House of Delegates. The Resident Physicians Section will be represented in the KMA House of Delegates by one voting representative elected by the Governing Council of the Resident Physicians Section.

(d) Associate Members. The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State, but shall not be deemed to include physicians employed on a full-time basis by the Veterans Administration.

(2) Dentists may be invited to become Associate members.

(3) Physicians residing and/or practicing in communities bordering Kentucky who are active members of their home state and county society and who wish to become members of KMA on an other than active basis may become Associate Members.

Associate members shall not have the right to vote nor to hold office, but shall receive *The Journal* and other publications of the Association.

(e) Inactive Members. The inactive membership of the Association shall consist of the inactive members of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive *The Journal* and other publications of the Association.

(f) Student Members. Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in an accredited medical school in the United States shall be eligible for membership in the Medical Student Section of the Kentucky Medical Association. This Medical Student Section shall be governed by its own Constitution and Bylaws, which Constitution and Bylaws shall not be in conflict with those of the parent Kentucky Medical Association. In order to insure the absence of any such conflict, the initial Constitution and Bylaws of the Student Section, as well as any later amendments thereto, shall be given prior approval by a majority of all Delegates present at the Annual Meeting of the KMA House of Delegates. Individual students may apply directly to the State Association for membership and be assigned to the county society of their choice. The determination

of such membership shall be coincident with the academic year of the institution in which the student is enrolled. Student members may not hold office in the State Association, but may be voting members of any State Association committee to which they are appointed. Student members may, however, hold office within the Student Section in accord with the provisions of that Section's Constitution and Bylaws. The Student Section will be represented in the House of Delegates through one voting representative, a student member of the Kentucky Medical Association elected by the Student Section membership attending the University of Kentucky College of Medicine and one voting representative, a student member of the Kentucky Medical Association elected by the Student Section membership attending the University of Louisville School of Medicine.

(g) Service Members. Members of the Association in good standing who enter military service and are ineligible for Association membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

(h) Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

(i) Special Members. Component societies may invite pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending and participating in the scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Section 3. Hospital Medical Staff Section. There shall be a special section for hospital medical staff physicians who already hold membership in KMA. The Hospital Medical Staff Section (HMSS) shall be governed by its own Constitution and Bylaws, which Constitution and Bylaws shall not be in conflict with the Constitution, Bylaws and Board policies of the parent Kentucky Medical Association. Should any questions arise regarding the existence of a conflict, the KMA Board of Trustees shall be the final arbiter of such questions. The Hospital Medical Staff Section shall elect a Delegate and Alternate Delegate to the KMA House of Delegates. The Delegate to the KMA House of Delegates, or his Alternate as the case may be, shall be a voting member of the House and may present resolutions on behalf of the HMSS.

Section 4. Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any Annual Meeting upon invitation of the Board of Trustees and shall be accorded the privilege of participating in all of the scientific work of that meeting.

Section 5. No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

CHAPTER II. ANNUAL AND SPECIAL MEETINGS OF THE ASSOCIATION

Section 1. The Association shall hold its annual and special meetings at such times and places as may be determined by the House of Delegates.

Section 2. The Annual Meeting shall consist of one or more scientific sessions, at least two meetings of the House of Delegates, and such other gatherings as may be authorized by the Board of Trustees. Each scientific session shall be presided over by the President or in his absence or disability or at his request by the President-Elect or such officers as the Board of Trustees may direct. The entire time of the scientific sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Section 3. The name of a physician upon the properly certified roster of members or list of delegates of a component society which has paid its annual assessment, shall be prima facie evidence of his right to register at any meeting of this Association.

Section 4. Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

CHAPTER III. THE HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet in Regular Session at the time and place of the Annual Meeting, and shall, insofar as is practicable, fix its hours of meeting so as to give delegates an opportunity to attend the scientific sessions and other proceedings. Provided, however, that if the business interests of the Association and profession require, the Speaker, with the consent of the Board of Trustees, may convene the Regular Session in advance of the Annual Meeting, and the House may remain in session after the final adjournment thereof.

Section 2. The House may be called into Special Session by the President with the approval of the Board of Trustees, and a special session shall be called by the President on the written request of fifty duly elected delegates of the Association. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Section 3. When a special session is called, the Secretary-Treasurer shall mail a notice of the time, place, and purpose of such meeting to the last known address of each delegate at least ten days before such session.

Section 4. The Speaker shall, by virtue of his office, be responsible for making all arrangements for all sessions, regular or special, of the House.

Section 5. The members of the House of Delegates shall be elected by the various component societies in the manner prescribed in Chapter XII of these Bylaws.

Section 6. In the event a component society is not represented at any meeting of the House, the Speaker shall consult with any officer of the component society who is in attendance and, with the approval of the Credentials Committee, may appoint any active member of such component society who is in attendance, as its alternate delegate. If no officer of such society is present, the Speaker may make the appointment without consultation, but with the approval of the Credentials Committee. All such appointments shall also be subject to the approval of the House.

Section 7. Forty per cent of the qualified delegates, as defined by Article VI of the constitution, shall constitute a quorum and all of the meetings of the House shall be open to the members of the Association. The House shall have the right to go into executive session whenever in its judgment such action is indicated; except that active members of the Association shall have the right to attend all executive sessions.

Section 8. Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary-Treasurer following its introduction. If the author presenting the resolution presents it as an individual member of the Kentucky Medical Association, the resolution shall be signed by him. If the author be a group of members or component society, the resolution shall be signed by the authorized spokesman for that group. Immediately after the resolution has been introduced, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 9. No resolution shall be introduced in the first meeting of the House of Delegates by any member or group of members other than the Board of Trustees unless a copy thereof was furnished to the Headquarters Office at least seven days prior to its introduction. The only exception to this shall be that a resolution which has been signed by ten or more members of the House of Delegates and of which there are sufficient printed copies to distribute to each member

of the House of Delegates may be received for consideration by an affirmative vote of three-fourths of the members present and voting. No new business shall be introduced in the last meeting of the House without unanimous consent, except when presented by the Board of Trustees. All new business so presented shall require the affirmative vote of three-fourths of those delegates present and voting, for adoption.

Section 10. The House shall give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Meeting a stepping stone to further ones of higher interest.

Section 11. It shall consider and advise as to the material interest of the profession, and of the public in those important matters wherein the public is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse information in relation thereto.

Section 12. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

Section 13. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 14. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

Section 15. It shall, upon application, provide and issue charters to county societies organized in conformity with the Constitution and Bylaws of this Association.

Section 16. The state shall be divided into the following districts:

No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2—Daviess, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington.

No. 5—Jefferson.

No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, and Trimble.

No. 8—Boone, Campbell, and Kenton.

No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10—Fayette, Jessamine, and Woodford.

No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15—Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.

District meetings may be held as desired, and District Medical Associations may be organized as desired, according to the districts outlined above.

Section 17. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 18. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective, except as provided in Chapter VI, Section 4, and except for the selection of the recipient of the Kentucky Medical Association Award (Outstanding Layman) and Distinguished Service Award (Outstanding Physician), which selections shall be made by the KMA Awards Committee.

Section 19. A digest of proceedings of the House of Delegates shall be published and distributed to the membership annually.

CHAPTER IV. ELECTION OF OFFICERS AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Section 1. The President-Elect and the Vice President shall be elected from the state at large for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. A majority vote of those attending and voting shall be required for the election of the President-Elect and the Vice President and on any ballot where a majority is not obtained, the candidate with the least votes shall be dropped and further balloting held until such time as one candidate receives a majority of the votes cast. Delegates to the AMA and their alternates shall be elected from the state at large for terms of two years with the provision that no more then one delegate and no more than one alternate delegate shall be elected from one component society. The Speaker of the House of Delegates, the Vice-Speaker and the Secretary-Treasurer shall be elected for terms of three years. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. The terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice-President, Secretary-Treasurer, Speaker or Vice-Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least three years.

Section 2. During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the Committee, and the person receiving the most votes shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event of a tie, the Committee shall elect one of its members as Chairman. The Committee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating Committee shall verify the eligibility and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Section 3. The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

Section 4. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees, the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting shall continue in like manner until an election occurs.

Section 5. Any member may make known his availability for any office within the gift of the Association. However, it would be regarded as unseemly for any member to actively campaign for his own election.

Section 6. The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the

Trustee and his Alternate to serve the District. Additional nominations may be made from the floor when the Nominating Committee makes its report to the House of Delegates.

CHAPTER V. DUTIES OF OFFICERS OTHER THAN TRUSTEES AND ALTERNATES

Section 1. Except as provided in Chapter II, Section 2 hereof, the President shall preside at all scientific sessions of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such duties as custom and parliamentary usage may require. He shall be the real head of the profession in the State during his term of office and so far as practicable, shall visit or cause to be visited on his behalf, the various sections of the State and assist the Trustees in building up the county societies and in making their work more practical and useful. He shall be reimbursed for his reasonable and necessary travel expense incurred in the performance of his duties as President.

Section 2. The President-Elect shall assist the President in visitation of county and other meetings. He shall become president of the Association at the next Annual Meeting following his election as president-elect. In the event of his death or resignation, or if he becomes permanently disqualified or disabled, his successor shall be elected by the House of delegates and shall be installed as President of the Association at its next regular session.

Section 3. The Vice President shall assist the President in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the President, the Vice-President shall succeed to the office of the President.

Section 4. The President-Elect and the Vice-President, when acting for and in behalf of the President, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance of their duties in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses.

Section 5. The Speaker of the House shall preside at all meetings of the House of Delegates. He shall appoint all committees of the House of Delegates with the approval of the House of Delegates. He shall be a non-voting member of said committees, and shall perform such other duties as custom and parliamentary usage may require.

Section 6. The Vice Speaker shall assume the duties of the Speaker in his absence and shall assist the Speaker in the performance of his duties. In the event of the death, disability, resignation, or removal of the Speaker, the Vice Speaker shall automatically become Speaker of the House of Delegates.

Section 7. The Secretary-Treasurer shall advise the Executive Vice President in all administrative matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and as may be prescribed by the Board of Trustees. The Secretary-Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Executive Vice President or his designee and shall be countersigned by the Secretary-Treasurer of the Association. When one or more of the above-named officials are not readily available, four specifically designated representatives of the Executive Committee are authorized to countersign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. The four members of the Executive Committee authorized to countersign vouchers shall be designated by the Board during their reorganizational meeting in September and, whenever possible should be easily accessible from the KMA Headquarters Office. All those authorized to countersign vouchers shall be required to give bond in an amount to be determined by the Board of Trustees. The Secretary-Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

CHAPTER VI. BOARD OF TRUSTEES

Section 1. The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary-Treasurer, and the Delegates and Alternate Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the Vice-President, the President-Elect, the Secretary-Treasurer, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two Trustees to be elected annually by the Board of Trustees. A majority of the full Board, and a majority of the full Executive Committee, to-wit, 5, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved by the Board to itself.

Section 2. The Board shall meet daily, or as required, during the Annual Meeting of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Trustees. It shall meet on the last day of the Annual Meeting for reorganization and for the outlining of the work for the ensuing year. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the accounts of the Secretary-Treasurer and other agents of this Association and which shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. By accepting or rejecting this report, the House may approve or disapprove the action of the Board of Trustees in whole or in part, with respect to any matter reported upon therein. In the event of a vacancy in any office other than that of President, the Board may fill the same until the annual election.

Section 3. Each Trustee shall be organizer, peacemaker and censor for his district. He shall hold at least one district meeting each year for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Trustee in the line of his duties herein imposed may be paid by the Secretary-Treasurer upon a proper itemized statement but this shall not be constituted to include his expenses in attending the Annual Meeting of the Association.

Section 4. The Board shall have the authority to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters, to the public and press.

Section 5. The *Journal of the Kentucky Medical Association* shall be the official organ of the Association and shall be published under the supervision of the Board. The Editor of the *Journal* shall be elected by the Board. All money received by the *Journal* or by any member of its staff on its behalf, shall be paid to the Secretary-Treasurer on the first of each month. The Board shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

Section 6. All commercial exhibits during the Annual Meeting shall be within the control and direction of the Board.

Section 7. In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In the case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

Section 8. The Association, upon the request of any member in good standing who is a defendant in a professional liability suit, will provide such member with the consultative service of competent legal counsel selected by the Secretary-Treasurer acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Board outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Board to defend such suit through one court.

Section 9. The Board shall employ an Executive Vice President whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Vice President shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other rep-

resentatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the Annual Meeting, the meetings of the House of Delegates, the meetings of the Board, as many of the committee and council meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers, committees, and councils of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Board.

He shall be the custodian of the general papers and records of the Association (including those of the Secretary-Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees and councils of their appointment and duties.

He shall account for and promptly turn over to the Secretary-Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Secretary-Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Secretary-Treasurer. He shall, within thirty days preceding each Annual Meeting, submit his financial books and records to a certified public accountant, approved by the Board, whose report shall be submitted to the House of Delegates.

He shall keep a record of all physicians in the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor, or otherwise supervise the publication of *The Journal of the Kentucky Medical Association* and such other publications as may be authorized by the House of Delegates, under the guidance and direction of the Board.

He shall perform such additional duties as may be required by the House of Delegates, the Board, or the President, and shall employ such assistants as the Board may direct. He shall serve at the pleasure of the Board, and in the event of his death, resignation, or removal, the Board shall have the power to fill the vacancy. From time to time, or as directed by the Board, he shall make written reports to the Board and House of Delegates concerning his activities and those of the Headquarters Office.

CHAPTER VII. DISCIPLINE—THE JUDICIAL COUNCIL

Section 1. There is hereby created a Judicial Council composed of the Secretary-Treasurer of the Association and four members to be elected by the House of Delegates for terms of four years each. One member shall be elected from each of the traditional eastern, western, and central districts, and one member from the state at large. Members of the first Judicial Council shall be elected for terms of one, two, three and four years, respectively so that thereafter, one member will e elected each year. The Council shall annually elect a chairman.

To be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or a Delegate to the AMA or (2) Have served five years as a member of the House of Delegates.

It shall be the duty of the Board of Trustees to nominate at least one candidate for each vacancy on the Judicial Council, but additional nominations may be made from the floor. Vacancies which occur between Regular Sessions of the House of Delegates, shall be filled by the Board of Trustees. No member, other than the Secretary-Treasurer shall serve more than two consecutive terms.

Section 2. The Judicial Council shall be the Board of Censors of the Association. It shall be the final arbiter of all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All charges of breach of medical ethics brought before the House of Delegates shall be referred to the Judical Council without discussion. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of this Association, or the Principles of Ethics of the American Medical Association shall be liable to censure, fine, suspension, or expulsion upon order of the Judical Council. Provided, however, that if in addition to discipline by the Association, the Judicial Council shall be of the opinion that the offending member's license to practice medicine should be revoked, it shall report this to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Medical Licensure for this purpose.

Suspension shall be for a specified period during which the member shall remain liable for the payment of dues but shall not be eligible to hold office, attend business meetings or otherwise participate in Associational activities at the county, district or state levels. Upon the expiration of the period of suspension, every suspended member shall be automatically restored to all of the rights and privileges of his class of membership unless the Judicial Council determines that his conduct during the period of suspension indicates that he is unworthy of such restoration, in which event his suspension may be extended or he may be expelled.

Upon the complaint of any member or aggrieved individual involved, the Judicial Council may initiate disciplinary proceedings against any member, and may intervene in or supersede county, individual trustee, or district disciplinary proceedings, whenever in its sole judgment and opinion, a disciplinary matter is not being handled in an expeditious manner, and may render a decision therein. In all cases in which the Association, rather than a member or aggrieved individual, appears to be the real party in interest, the Judicial Council may refer the complaint to the Board of Trustees for a determination as to whether probable cause for disciplinary action exists. If the Board of Trustees resolves this question in the affirmative, it shall so charge the respondent, and a representative of the Board shall thereupon be responsible for presenting the evidence in support of such charge at any hearing held thereon.

In all proceedings of the Judicial Council, the due process requirements of reasonable notice and a full and fair hearing shall be observed. No recommended disciplinary decision of an individual trustee or any district grievance committee shall become effective unless and until approved by the Judicial Council.

Section 3. It shall consider all appeals from the recommended decisions of individual trustees and District Grievance Committees. In this case of appeals from the decisions of individual trustees, the Judicial Council may admit such oral or written evidence as in its judgment will best and most fairly present the facts, but all appeals from the recommended decisions of District Gievance Committees shall be considered on the record made before such committee. It shall be the duty of the Secretary to notify the parties with respect to its disposition of each case.

Section 4. The Judicial Council may hear appeals from the disciplinary orders of component societies. Provided, however, that such appeals shall be considered on the record made before the component societies.

Section 5. Efforts toward conciliation and compromise shall precede the hearing of all disciplinary cases, but the decision of the Judicial Council shall be final. A party aggrieved by the decision of the Judicial Council may seek an appeal to the Judicial Council of the American Medical Association in accordance with the jurisdiction, rules and regulations of that Association.

Section 6. Component societies are encouraged to create suitable disciplinary procedures which guarantee due process, and to dispose of all disciplinary problems which come to their attention. It is recognized, however, that it may not be feasible for some societies to do so, and the District Grievance Committees hereinafter created, are designed to meet the needs of county societies which are without a functioning grievance committee.

Section 7. The trustee of each district is hereby designated the chairman of his District Grievance Committee. The Judicial Council shall designate two additional trustees from districts adjoining that of the chairman, and the three trustees thus selected shall constitute the District Grievance Committee. All grievances which cannot be resolved by individual trustees, shall be referred to the local grievance committee or the district grievance committee for the district in which the respondent physician or county society resides.

Section 8. District Grievance Committees shall investigate every grievance coming to their attention, taking care that the physician complained of shall have ample opportunity to respond to the complaint. If, after careful investigation the complaint appears to be without merit, the committee shall so report to the Judicial Council, including sufficient facts in its report to enable Judicial Council to form its own conclusions.

If the District Grievance Committee's investigation indicates that the member may be a proper subject of disciplinary action, the committee shall, upon reasonable notice, hold a hearing at which the complainant and the respondent shall be entitled to be represented by counsel, to present the testimony of witnesses in his behalf, and to cross-examine witnesses against him. All testimony shall be under oath and shall be recorded by a competent reporter at the expense

of the Association, but shall not be transcribed unless and until an appeal is taken as hereinafter provided.

When all of the testimony has been heard and all evidence received, the committee shall make written findings and recommendations which it shall transmit to the Judicial Council, furnishing copies thereof to the parties.

Section 9. Any party aggrieved by the findings or recommendations of the committee, may, within 30 days, appeal to the Judicial Council. Appeals shall be taken by filing with the Secretary-Treasurer a copy of the entire record made before the District Grievance Committee (including a transcript of the testimony, procured at the appellant's expense) together with a written statement of appeal pointing out in detail wherein the committee has erred, and directing the attention of the Judicial Council to those portions of the transcript upon which he relies, provided, however, that the Judicial Council may extend the time in which the transcript must be filed, upon request made within the initial thirty-day period.

Section 10. No report or opinion of the Judicial Council shall be considered the policy of the Association until approved by the House of Delegates. Any report or opinion of the Judical Council submitted to the House of Delegates may be accepted or rejected or referred back to the Judicial Council but not modified by the House of Delegates.

CHAPTER VIII. COMMITTEES AND COMMISSIONS

Section 1. The Board of Trustees shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities in the fields of business and scientific meetings, medical education and hospitals, legislation, medical services, communications and public service, and governmental medical services.

Section 2. The Executive Committee shall serve as the nominating committee for all standing committee and commission appointments, but the trustees may make additional nominations. When the Executive Committee sits as such nominating committee, the President-Elect shall serve as Chairman.

Section 3. The President, with the advice and consent of the Chairman of the Board of Trustees, may appoint temporary ad hoc committees to perform specified functions. All such committees shall expire at the end of the term of the President by whom appointed.

Section 4. No committee or commission shall have power or authority to fix or determine Associational policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Board of Trustees.

CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Member, $400, (except those physicians elected to KMA membership within six months of the completion of their residency, fellowship or fulfillment of government-obligated service shall pay $200 their first full year of membership); (2) Life Members, no dues; (3) Associate Members, $75; (4) In-training Members, $30, except that in-training members shall not be liable for dues during the first six months of their first postgraduate year in an approved residency program in Kentucky; (5) Inactive Members, $50; (6) Student Members, no dues; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be prorated on a quarterly basis as determined by the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments, together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary-Treasurer of this Association as of the first day of January each year.

Section 2. Unless otherwise provided by the Board of Trustees pursuant to Section 1 hereof, any component society which fails to pay its assessments, or make the report as required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are provided by the motion or resolution.

CHAPTER X. RULES OF CONDUCT

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

CHAPTER XI. RULES OF ORDER

The deliberations of this Association shall be governed by parliamentary usage as contained in the latest edition of Sturgis' Standard Code of Parliamentary Procedure, unless otherwise determined by a vote of its respective bodies.

CHAPTER XII. COUNTY SOCIETIES

Section 1. Except as provided in Section 3 of this Chapter, all county medical societies in this State which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

The House of Delegates shall have authority to evoke the charter of any component society whose actions are in conflict with the letter or spirit of the Constitution and Bylaws.

Section 2. As rapidly as can be done after the adoption of this Constitution and Bylaws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Section 3. Only one component society shall be chartered in any county. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky Medical Association.

Section 4. In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolution, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association; provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 11 of this Chapter; and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

A multi-county component society may be disaggregated so that an individual county society may regain independent status when a majority of the members in that county indicate their desire to reorganize. At that time the members from the withdrawing county shall forward a petition containing the signatures of a majority of the members in that county to be validated by KMA. The withdrawing county shall further forward a resolution to the KMA Headquarters Office to be submitted to the House of Delegates at its next regular meeting, requesting recognition as a county society and issuance of a charter, in accord with Chapter XII, Section 1 of the KMA Bylaws. Once this charter is issued, the new county society shall become a recognized entity at the beginning of the following KMA dues year and those counties remaining with the original multi-county unit may continue to function under their pre-existing charter.

Section 5. Each component society shall be the sole judge of the qualifications of its own members. All members of component societies shall be members of the Kentucky Medical Association and shall be classified in accordance with Chapter 1, Section 2 of these

Bylaws, provided, however, that no physician who is under suspension or who has been expelled shall thereafter, without reinstatement by the Board of Trustees be eligible for membership in any component society. Any physician who desires to become a member of the Kentucky Medical Association shall first apply to the component society in the county in which he resides, for membership therein. Except as hereinafter provided in Sections 6 and or 8 of this chapter, no physician shall be an active member of a component society in any county other than the county in which he resides.

Section 6. Any physician who may feel aggrieved by the action of the component society of the county in which he resides, in refusing him membership, shall have the right to appeal to the Board of Trustees, which, upon a majority vote, may permit him to apply for membership in a component society in a county which is adjacent to the county in which he resides.

Section 7. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the component society into whose jurisdiction he moves, if he is admitted to membership therein.

Section 8. A physician whose residence is closer to the headquarters of an adjacent component society than it is to the headquarters of the component society of the county in which he resides, may, with the consent of the component society within whose jurisdiction he resides, hold membership in said adjacent component society.

Section 9. Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Upon reasonable notice and after a hearing, component societies may discipline their members by censure, fine, suspension or expulsion, for any breach of the Principles of Medical Ethics or any bylaw, rule or regulation lawfully adopted by such societies or this Association. At every hearing, the accused shall be entitled to be represented by counsel and to cross-examine witnesses, and the society shall cause a stenographic record to be made of the entire proceedings. The stenographer's notes need not be transcribed unless and until requested by the respondent member.

Any physician aggrieved by the disciplinary action of a component society may, within ninety (90) days, appeal to the Judicial Council, whose decision shall be final. This appeal shall be in writing and shall point out in detail the errors committed by the county society. It shall be accompanied by a transcript of the proceedings before the county society, procured at appellant's expense, and the statement of appeal shall direct the attention of the Judicial Council to those portions of the transcipt upon which he relies.

Any member who fails or refuses to comply with the lawful disciplinary orders of his component society shall, if such failure or refusal continues for more than thirty (30) days, be automatically suspended from membership, provided, however, that an appeal shall stay the suspension until a final decision is made by the Judical Council.

The resignation of a member against whom disciplinary charges are pending or who is in default of the disciplinary judgment of his county society, a district grievance committee or the Board of Trustees shall not be accepted and no member who is suspended or expelled may be reinstated or readmitted unless and until he complies with all lawful orders of his component society and the Board of Trustees.

Section 10. Frequent meetings shall be encouraged and the most attractive programs arranged that are possible. Members shall be especially encouraged to do postgraduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

Section 11. At the time of the annual election of officers, each component society shall elect a delegate or delegates to represent it in the House of Delegates. The term of a delegate shall commence on the first day of the regular session of the House following his election, and shall end on the day before the first day of the next regular session, provided, however, that component societies may elect delegates for more than one term at any election. Each component society may elect one delegate for each 25 voting members in good standing, plus one delegate for one or more voting members in excess of multiples of 25, provided, however that each component society shall be entitled to at least one delegate regardless of the number of voting members it may have and that each multi-county society shall be entitled to the same number of delegates as its component societies would have had. The secretary of the society shall send a list of such delegates to the Secretary-Treasurer of this Association not later than 45 days before the next Annual Meeting. It shall be the obligation of a component society which elects delegates to serve more than one year, to provide the KMA Headquarters Office with a certified list of its delegates each year.

Section 12. The secretary of each component society shall keep a roster of its members and a list of nonaffiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information upon blanks supplied him for the purpose, to the Secretary-Treasurer of the Association, on the first day of January of each year or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

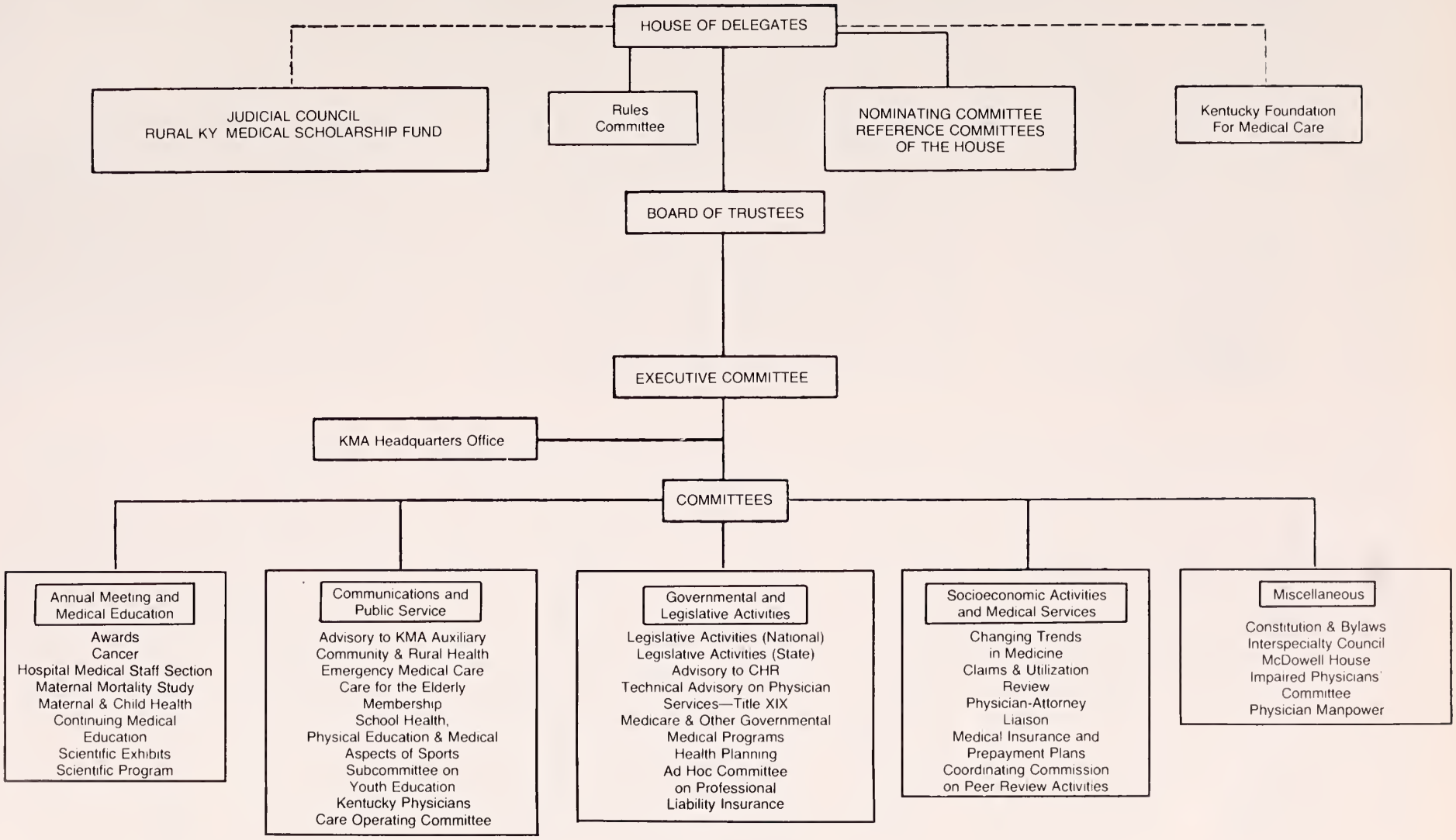
CHAPTER XIII. AMENDMENTS

Section 1. These bylaws may be amended at any session of the House of Delegates by a majority vote of the Delegates present at a meeting of that session, provided: (1) the amendment proposed is presented in writing to the Delegates thirty days prior to the meeting, or (2) the amendment is introduced in writing at a regular meeting of the House of Delegates during the session and considered at the following meeting of the session, the vote on said amendment having been postponed definitely for a period of at least one day.

Section 2. An amendment to or change in the bylaws may be proposed by a reference committee or by the Board of Trustees at the final meeting of a session of the House of Delegates, but, not having been postponed definitely for a period of one day, requires a two-thirds vote.

Section 3. An amendment to these bylaws may be proposed in writing by an individual Delegate at the final meeting of a session of the House of Delegates. If such an amendment is proposed, the proposal will be postponed definitely and studied by the appropriate reference committee at that time, reporting their recommendation back to the House of Delegates before the final meeting is adjourned. Such an amendment, having not been postponed definitely for a period of one day, requires a two-thirds vote.

KMA Organization Chart—Revised November 1986



1986–87 Committees

Advisory Committee to the KMA Auxiliary

Wally O. Montgomery, M.D., Paducah, Chairman
Richard F. Hench, M.D., Lexington
Charles C. Smith, Jr., M.D., Louisville

Scientific Program Committee

Max A. Crocker, M.D., Lexington, Chairman
Donald C. Barton, M.D., Corbin
James R. Cundiff, M.D., Shepherdsville
Richard F. Hench, M.D., Lexington
Kenneth Holtzapple, M.D., Louisville
Dennis B. Kelly, M.D., Lexington
Peter L. Thurman, M.D., Louisville
Thomas C. Stine, M.D., Highland Heights

Scientific Exhibits Committee

Richard A. Kielar, M.D., Lexington, Chariman
James P. Moss, M.D., Louisville
John W. Ratliff, M.D., Lebanon
Sibu Saha, M.D., Lexington

Awards Committee

S. Randolph Scheen, M.D., Louisville, Chairman
Ballard W. Cassady, M.D., Pikeville
Delmas M. Clardy, M.D., Hopkinsville
Carl Cooper, Jr., M.D., Bedford
David A. Hull, M.D., Lexington
Paul J. Parks, M.D., Bowling Green
Charles C. Smith, Jr., M.D., Louisville

Continuing Medical Education Committee

James E. Redmon, Jr., M.D., Louisville, Chairman
James W. Baker, M.D., Lexington
Garry N. Binegar, M.D., Owensboro
John V. Borders, M.D., Lexington
Charles M. Brohm, M.D., Louisville
Michael E. Daugherty, M.D., Lexington
James E. Greene, M.D., Louisville
Brooks Horsley, M.D., Madisonville
John M. Johnstone, M.D., Richmond
Sally S. Mattingly, M.D., Lexington
James A. Parrott, M.D., Hopkinsville
Robert W. Powell, M.D., Louisville
Bruce M. Stapleton, M.D., Ashland
Alfred L. Thompson, Jr., M.D., Louisville
Bruce Spears, Louisville (student)

Ex-Officio:
Constance Fulmer, Ph.D., Lexington
Bernard Tamme, Louisville, KHA Representative

Council for Continuing Medical Education

James A. Baumgarten, M.D., Louisville, Chairman
Keith H. Crawford, M.D., Paducah
Stuart Fink, M.D., Louisville
William H. Mitchell, M.D., Richmond
Theresa M. Richter, M.D., Fort Mitchell
Hiram C. Polk, M.D., Louisville
Joseph E. Roe, M.D., Madisonville
Charles R. Sachatello, M.D., Lexington
Paul J. Sides, M.D., Lancaster
Sam H. Traughber, M.D., Hopkinsville
Nnamdi Davis, Louisville (student)

Cancer Committee

P. Raphael Caffrey, M.D., Lexington, Chairman
Harry E. Altman, M.D., Pikeville
Harry W. Carloss, M.D., Paducah
Clinton C. Cook, III, M.D., Louisville
John D. Cronin, M.D., Lexington
Thomas G. Day, Jr., M.D., Louisville
Gilbert H. Friedell, M.D., Lexington
Dennis L. Havens, M.D., Lexington
Walter J. Kuebler, II, M.D., Bowling Green
Carol S. Milburn, M.D., Crestview Hills
Joseph L. Milburn, M.D., Madisonville
Condict Moore, M.D., Louisville
Glenn I. Moore, M.D., Lexington
Elie P. Saikaly, M.D., Madisonville
Janell Seeger, M.D., Louisville
John S. Spratt, M.D., Louisville
Sue Winard, M.D., Lexington
Anne Winterland, M.D., Louisville (resident)
Robert Hiltz, Louisville (student)

Ex-Officio:
Wayne B. Miller, Louisville

Emergency Medical Care Committee

E. Truman Mays, M.D., Somerset, Chairman
W. Stephen Aaron, M.D., Louisville
John W. Collins, M.D., Lexington
James L. Combs, M.D., Covington
James A. Freer, M.D., Louisville
Diller B. Groff, M.D., Louisville
John J. Guarnaschelli, M.D., Louisville
Melanio Y. Medroso, M.D., Somerset
R. John Sanders, M.D., Owensboro
Charles B. Spalding, M.D., Bardstown
Irvin E. Smith, M.D., Paducah
John D. Stewart, M.D., Lexington
Donald M. Thomas, M.D., Louisville
Phillip A. Tibbs, M.D., Lexington
Brian W. Vanderboegh, M.D., Paducah
Carla Turner, M.D., Louisville
Bruce Spears, Louisville (student)
Barbara Cox, Lousville (Auxiliary)

Physician Manpower Committee

Robert Goodin, M.D., Louisville, Chairman
John D. Gover, M.D., Bowling Green
Donald R. Kmetz, M.D., Louisville
William Mitchell, M.D., Richmond
Gorden T. McMurry, M.D., Louisville
Robin Powell, M.D., Lexington
Fred Collatz, Louisville, (resident)
Tom Baumgarten, Louisville, (student)

Interspecialty Council

Paul J. Parks, M.D., Bowling Green, Chairman
Representatives of 23 specialty societies:
Kentucky Society of Allergy and Clinical Immunology
Charles S. Smith, M.D., Anchorage
Kentucky Society of Anesthesiologists
John E. Plumlee, M.D., Lexington
Kentucky Chapter, American College of Chest Physicians
Robert W. Powell, M.D., Louisville
Kentucky Dermatological Society
Michael Faurest, M.D., Louisville
Kentucky Society of Otolaryngology, Head and Neck Surgery, Inc.
Roland W. Richmond, M.D., Louisville
Kentucky Society of Eye Physicians and Surgeons
Arthur H. Keeney, M.D., Louisville
Kentucky Chapter, American College of Emergency Physicians
Ron Weiss, M.D., Louisville
Kentucky Chapter, American Academy of Family Physicians
Paul R. Smith, M.D., Shelbyville
Kentucky Society of Gastrointestinal Endoscopy
Richard A. Wright, M.D., Louisville
Kentucky Society of Internal Medicine
Barry N. Purdom, M.D., Lexington
Kentucky Neurosurgical Society
John Guarnaschelli, M.D., Louisville
KOGS-Kentucky Section ACOG
Glenn I. Moore, M.D., Lexington
Kentucky Occupational Medical Association
Lyle Boyea, M.D., Louisville
Kentucky Orthopaedic Society
William C. Ramsey, M.D., Louisville
Kentucky Society of Pathologists
Stewart E. Wolfson, M.D., Louisville
Kentucky Chapter, American Academy of Pediatrics
Don A. Cantley, M.D., Henderson
Kentucky Chapter, American College of Physicians
Charles C. Smith, Jr., M.D., Louisville
Kentucky Society for Plastic and Reconstructive Surgery, Inc.
John Weeter, M.D., Louisville
Kentucky Psychiatric Association
Stanley Hammons, M.D., Lexington
Kentucky Association of Public Health Physicians
H. M. Vandiviere, M.D., Lexington
Kentucky Chapter, American College of Radiology
Nettie King, M.D., Louisville
Kentucky Chapter, American College of Surgeons
Nelson B. Rue, M.D., Bowling Green
Kentucky Urological Assocation
Cooper Buschmeyer, M.D., Louisville

Maternal Mortality Study Committee

John W. Greene, M.D., Lexington, Chairman
Gordon D. Betts, M.D., Somerset
W. Lisle Dalton, M.D., Lexington
Joseph F. Daugherty, M.D., Florence
Arther J. Donovan, Jr., M.D., Louisville
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Journal of the Kentucky
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Health and Safety Tip From
the American Medical Association

MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.

2. Drinking to handle problems or relieve symptoms.

3. Obvious preoccupation with alcohol and the frequent need to have a drink.

4. Surreptitious drinking or gulping of drinks.

5. Tendency toward making alibis and weak excuses for drinking.

6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.

7. Frequent absenteeism from the job, especially following weekends and holidays.

8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.

9. Shabby appearance. poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.

10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.

11. Multiple contacts with the health care system with disorders that are alcohol caused or related.

12. Persistent marital and family problems, perhaps with multiple marriages.

13. History of arrests for drunkenness or drunken driving.

Submitted by the KMA Impaired Physicians' Committee

Mark Your Calendar to Attend the
KMA Annual Meeting
"Medical Excellence 1987"
September 14-17, 1987
Ramada Inn East/Bluegrass Convention Center

Louisville, Kentucky

A WORD TO THE WHYS

WHY AMA? The AMA has tackled the issue of cost effective quality medical care by supporting the development of health care coalitions. The Association believes the best mechanism for keeping health costs down without sacrificing quality or accessibility is through voluntary coalitions in which physicians actively participate. Working to promote high quality, affordable medical care in the United States: it's one more good reason why you should be a part of the AMA.

WHY AMA? The AMA has actively sought to attract women as members and leaders in organized medicine. Ongoing AMA projects and concentrated efforts by county, state, and specialty societies have significantly increased the leadership role and membership of women in organized medicine. Strengthening the voice of women in medicine through encouraging active participation: it's one more good reason why you should be a part of the AMA.

WHY AMA? Through the AMA library you can have immediate access to a vast store of medical, scientific, and socio-economic information. The library maintains a large collection of books, journals, and microfilm and provides instant on-line access to countless information sources through computerized data bases. The AMA library: it's one more good reason why you should be part of the AMA.

To Join, Contact your county or state medical society or write: Division of Membership, AMA, 535 North Dearborn Street, Chicago, Illinois 60610 or call collect, (312) 751-6196.

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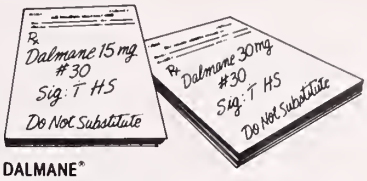
References: **1.** Kales J, *et al: Clin Pharmacol Ther 12*:691-697, Jul-Aug 1971. **2.** Kales A, *et al: Clin Pharmacol Ther 18*:356-363, Sep 1975. **3.** Kales A, *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **4.** Kales A, *et al: Clin Pharmacol Ther 32*:781-788, Dec 1982. **5.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Sac 27*:541-546, Dec 1979. **6.** Dement WC, *et al: Behav Med*, pp. 25-31, Oct 1978. **7.** Kales A, Kales JD: *J Clin Psychapharmacal 3*:140-150, Apr 1983. **8.** Tennont FS, *et al:* Symposium on the Treatment of Sleep Disorders, Teleconference, Oct 16, 1984. **9.** Greenblott DJ, Allen MD, Shader RI: *Clin Pharmacal Ther 21*:355-361, Mar 1977.



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Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase, and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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